

# **Systematic reference sample generation for multiplexed serological assays**

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## Supplement A) Table of screened TB antigens

(all proteins are derived from *E.coli* expression systems)

Gene Locus	Symbol	description
Rv0212c	nadR	asnC-family transcriptional regulator
Rv0272c		hypothetical protein
Rv0302		transcriptional regulator, tetR/acrR-family
Rv0379	secE2	protein transport protein
Rv0394c		secreted protein
Rv0440	groEL	60 kda chaperonin 2 groEL2
Rv0456c	echA2	enoyl-CoA hydratase
Rv0583c	lpqN	lipoprotein
Rv0632c	echA3	enoyl-CoA hydratase
Rv0798c	cfp29	29 kda antigen
Rv0801		conserved hypothetical protein
Rv0934	pstS1	periplasmic phosphate-binding lipoprotein
Rv0944		formamidopyrimidine-DNA glycosylase
Rv0984	moaB2	pterin-4-alpha-carbinolamine dehydratase
Rv1030	kdpB	potassium-transporting ATPase B chain
Rv1175c	fadH	NADPH dependent 2,4-dienoyl-CoA reductase
Rv1196	PPE18	PPE family protein
Rv1242		conserved hypothetical protein
Rv1284		conserved hypothetical protein
Rv1411c	lprG	lipoprotein
Rv1566c		invasion-associated protein
Rv1629	polA	DNA polymerase I
Rv1837c	glcB	malate synthase G
Rv1860	apa	alanine and proline rich secreted protein
Rv1886c	fbpB	secreted fibronectin-binding protein antigen 85-B
Rv1926c	mpt63	immunogenic protein
Rv1980c	mpt64	immunogenic protein
Rv1984c	cfp21	cutinase precursor
Rv2031c	hspX	heat shock protein
Rv2094c	tatA	SEC-independent protein translocase membrane-bound protein
Rv2151c	ftsQ	cell division protein
Rv2252		conserved hypothetical protein
Rv2282c		transcriptional regulator, lysR-family
Rv2544	lppB	lipoprotein
Rv2618		conserved hypothetical protein
Rv2870c	dxr	1-deoxy-D-xylulose 5-phosphate reductoisomerase
Rv2873	mpt83	cell surface lipoprotein
Rv2875	mpt70	major secreted immunogenic protein
Rv2927c		conserved hypothetical protein
Rv2984	ppk	polyphosphate kinase
Rv3050c		transcriptional regulator, asnC-family
Rv3243c		hypothetical protein
Rv3248c	sahH	adenosylhomocysteinase

Rv3319	sdhB	succinate dehydrogenase iron-sulphur protein subunit
Rv3326		transposase
Rv3362c		ATP/GTP-binding protein
Rv3376		conserved hypothetical protein
Rv3495c	lprN	MCE-family lipoprotein mce4E
Rv3616c		conserved alanine and glycine rich protein
Rv3628	ppa	inorganic pyrophosphatase
Rv3762c		hydrolase
Rv3763	lpqH	19 kda lipoprotein antigen precursor
Rv3775	lipE	lipase
Rv3804c	fbpA	secreted fibronectin-binding protein antigen
Rv3864		conserved hypothetical protein
Rv3874	esxB	10 kda culture filtrate antigen
Rv3878		conserved alanine rich protein
Rv3881c		conserved alanine and glycine rich protein

Supplement B) Input Data

sample	42_Rv0212_ADI 2 ls	43_Rv0212_ADI 2 ss	44_Rv0272c_ADI 3	45_Rv0272_ADI 2 ss
100321	1326.5	1673	530	3204
100348	493.5	636	197.5	1068
100364	3899.5	4902.5	2559.5	33077
100388	456	652	1712	25701
100400	555	627.5	521	3784.5
100455	947	1368.5	625	4547
100460	1533	2192.5	3505	33261
100462	587	722.5	228.5	466
100474	1862.5	1988	1293	11277.5
100480	1049	1354.5	733.5	2157
302314	884	1566.5	716	3815.5
302341	673.5	895	294	547.5
302368	513.5	713.5	256	496
3	803	2122	524	1279
5	798	1109	451.5	801
8	377	965	411.5	6319
9	216	287.5	144	270.5
12	481	588	291	514
13	730	2152	456	785.5
15	1175	2018	666.5	690
17	342	426	253	318
20	793.5	1100	558.5	671.5
21	543	950.5	355	937.5
24	712	1219.5	619	2543.5
25	417	838	145	872
26	653	627	227.5	391.5
28	801	2217.5	387	847
29	601.5	941	375	1202
30	1167	1629	602	902
33	768	1356	688	3083.5
39	522	901	226	332
41	350	554	192	267
42	513.5	861	254	442
44	327.5	480	155	214.5
60	364.5	545	185	327
74	540.5	520	201.5	915
78	1169	1919	773.5	927
84	471.5	529	311.5	551
88	140	176.5	56	117
96	225	205	156	259
98	591	682	395	607
99	459	1360	460	438
100	300	389	184	259.5
102	628	854	424	1516
109	799	1318	478	692
111	1001	1281	775	1223
113	2064	3058.5	926	1197
119	542	829	221	437.5
122	513	820	320	401

123	328	464	148.5	336
125	381	464.5	282.5	416
128	760	1451.5	456	644
129	2348.5	4146.5	1545	2863
130	661	664.5	455	474
131	617	683	440	379.5
134	653.5	591	169.5	311
138	200	278	96	179
141	208.5	314.5	125.5	210
142	218	301	157	188.5
143	670	762	498.5	572
149	327	370	159	273.5
150	743	1073	433	1658
154	674	1385.5	549.5	726
155	254	361	201	244
157	333.5	384.5	202	317
158	944	2267.5	540	709
159	612	557	354	339
164	581	957.5	324	448
166	753	1445	475	926
187	926	1080	412	1367.5
188	457.5	560	196.5	458
190	594	1133	330	442
191	269	388	733.5	14318
192	494	734.5	248	466
193	507	680	302.5	792
195	625	941	304	492
198	222.5	224	136	619.5
205	2207	3716	1271	1772.5
208	146	177.5	105	275
210	282	396.5	163	250
212	613.5	834	397	546
215 1260	325.5	509	190	309
215 1746	143.5	170.5	77	137.5
222	332.5	424	169.5	262
227	420	494	121	371
228	513	575.5	397.5	496
240	283.5	283	110	177
247	433.5	616.5	281	385.5
248	1164	1940	770.5	852
251	144	231	98	148
252	2383.5	3728	1565	2569
256	374	748.5	238	435
258	2448	3275	2085	12283
261	489.5	2538	240	484
263	676	1877.5	371	559
265	1885.5	2891	1307	1532
268	367	825	228.5	341.5
271	819.5	1403	455	504
273	420	592	275	489

275	259	439	109	177.5
277	879	1043	382	601.5
280	326	539.5	191	374
283	1163.5	1860	941.5	1568
284	541	613	243	502
293	1146.5	1973.5	626	957
298	29	26	17	32
300	499.5	514.5	278	404
301	1411	2545	1133	1132
303	275	332	181	243
305	241	349.5	163	209
307	281	384.5	110	746.5
308	584	702	334.5	420
311	219	222	127	230
314	97	101	62	89.5
325	643	1820	297	569.5
327	269	623	153.5	255.5
328	622	624.5	406.5	494
329	656	1036	341	517.5
332	889	1473	636	683
333	579.5	668	369	643.5
340	1597.5	2232.5	424.5	1136
344	531	734.5	268.5	340
345	1048.5	2150.5	963.5	1185
346	1595.5	4383.5	889	1521
354	947	1658.5	446	619
355	832	1177	501.5	671
358	412	556	222	430
363	263	343	179	249
373	418	607	231	390.5
381	315	416	252	292
382	248	279.5	85	155.5
385	451.5	528	194	284
386	280.5	320	226	295
387	671	849	376	498
392	209	303	123.5	219
395	1394.5	2260	746	1147
397	1185	1279	307.5	713
402	82	86	36	86
410	811	709.5	158	458.5
424	243	302	142	278
446	586	826	295	579
465	698.5	978	471.5	600.5
499	566	792	447	497
mean neg	255.5	350	112.75	231.75

46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_	52_Rv0632c_
161	459	431	367	313	2601.5	434
322	274.5	869	366	1520	1224	2207.5
534	1754	593	445	3350	2685	1008
99	272	305	568	192	826	329
88	391.5	8091	551.5	358.5	1971.5	1005.5
209.5	388	607	9622	4469	3068	511
250	740	529	804.5	1616	1187	1072
107	608	255.5	218	373	954.5	754
8451	548	550	418	2328	1112	1341
296	594	990.5	1928	1425	3431	792.5
313	456	715	791	383	948	693
244	292	303.5	492	811	7107	22220
184.5	217	220	276.5	439	52162	407.5
177	517	343	390	8282	880	580
240.5	3172	476	8677	216	2023	654
723.5	3290.5	222	3206	152	509	397.5
82.5	126	111	559	106	967.5	252.5
77	2295	286.5	793	180	3315	29919
190.5	1580	414	2061	4331.5	3002.5	20410.5
157	1600	707.5	1233.5	863	314	463.5
163	187	217	1688	205	1598.5	644
121	549	361	764	897	2032	544.5
1382	361	252.5	224.5	249	785	566
569.5	27752	408	3000	471	2166	796.5
149.5	91.5	148	138	452	1709	612.5
81	146	138	326.5	149.5	5087	245
271	299	337.5	1769.5	481.5	1273	1863
192	364	287	1382	518.5	9534.5	929
219	10321.5	536	13919	640	2373.5	872
258	607	781	8131	1351.5	516	523
186	351	313	2079.5	112	529.5	386.5
250	126.5	204	275.5	143	334	579
154	206	186	174	213.5	2182	1344
75.5	132	171	179	510	336.5	347
152	145.5	197	2712	173	335.5	320
209	193	188	446	266	631	606
97	855	631.5	674.5	338	1167	652.5
86	222	153	1290	6028.5	1038	385.5
44	57	65	81	302	221	67
225.5	8234	324	197	2287.5	533.5	453
417	478.5	545	355	5874.5	2527	590
186	278	273	170	263	556	398
5303.5	128.5	165.5	715	144	534	320.5
231	306.5	298	3999	278.5	680	473.5
213	410	438	381	2702.5	20906	1833
2787	1195	527.5	3986	940	3797	3158
230	742.5	1917	526.5	1054	1045	2536
99	507	273	169	1502.5	2172	223.5
148	15775.5	381.5	7568	210	1019.5	341

93	517	246	109.5	614	1057	383
209	26438	248	465	125	5632	1940.5
412	330.5	298	265	581.5	3015.5	517
280	1431	1816	761	844	962	23926
384	28305	581	233	1534	1774	252
668	23234	305	344.5	228.5	1557	2482
133	177	167	2848	12941	1267	222.5
75	90	126.5	62	1572	890.5	223
150	110	259	186	217.5	772	252
87	85	142	173	295.5	701	253
193.5	363	307	12467	509	5694	8432
107	133.5	151.5	78	871	1451	192.5
94	537	605	331.5	363.5	1163	571.5
226	20976	558.5	6379.5	357.5	1964.5	35197.5
575.5	76	85.5	684	98	559	256
155	3162	334	1431	201.5	1775.5	323.5
180.5	779	529	1069	1715	5570	712.5
114	260	228.5	191	15628	1006	342
121.5	276	274	255.5	236	478	9676
703	8607	460	645	304	3594.5	558
352	306	392	581	382	2139	552
81	166	379	452	1578	1167	386
120	438	414	346	220.5	1123	403
100.5	133.5	150.5	139.5	126.5	699.5	182
153	172	312	312	1124	488	404
148	337.5	356	294	1042	848	391.5
198	442	279	210	489	547	698
418	235	154	108	93	666	566.5
23637.5	2206	1225	8272	743	18566.5	1392
181.5	109	101	90	82	426.5	256
104	154	247	812	227.5	2075.5	242.5
112	1323	315.5	257.5	212	517	304
102	346	677.5	1034	450.5	280.5	284
41	55	70	450	42	122	85.5
131	133	154	2200	799	697	242
429	156	898	289.5	256.5	937.5	599
127	604	377.5	221	337	595	388
97.5	104	105.5	756	87	10626.5	215
526	643.5	466	714	3315.5	3285	1215
167	904.5	673	277.5	220.5	3303	424.5
1277	320	90	6708	81	452	3371.5
528	1758	1974	3188	2983	893	30219
840	331.5	170	203	753.5	654	570
117	759.5	1234	1077	550.5	363.5	1044
635	376.5	173	1657	206.5	612.5	1347
190.5	283	475	431	622	760	540
913	1354	1516	952	955	21575	1247
89	180	178	448.5	244	260	15065
167.5	12954.5	687.5	309	228	318	2909
1110	301	225	359	391.5	692	349



163.5	108.5	177.5	67.5	453.5	968.5	315
214	291	367	1118	1653	2968	673
341	156	176.5	6765	155	1041	775
336	1935	1094.5	788.5	1195	2210	1316
1168	305	300	467	838	762	2351
172	589.5	624	1366	467	4178	3965
10	9	13	6	16	8	17
119	289	228	3945	300.5	1555.5	698
7305	2967	1678	2452	480	1188	755
61.5	152	96	133	6581	983	189.5
161	96	343	848.5	155	380	209
783.5	98	148	767.5	4377	394	636
143	20999	322.5	1745	235	760.5	427
112	132	116	110	94	4069.5	250.5
64	49	65	267	118	4018	166
154.5	3031	295.5	733.5	290.5	1279	719.5
644	147	156.5	83	654.5	676	200.5
95	597.5	466.5	4063	648.5	1891.5	584
173	243	324	360.5	7839	385.5	430
167	665.5	572	1447	370	455.5	626
246	344	278	4145	2134	517	376
1044	476	412	3173	620	1093.5	596
133	196	253	907	574	998	874.5
857	1089	794.5	874	1319	3551	1733.5
121	1066.5	502.5	1525	1589.5	553	978
269	332.5	440	1366	1258	354	43311
270	1355.5	791	421	227.5	2776	441
309	192	198	526	311	7444.5	4086.5
108	202	137	1408	101	2369.5	200.5
142	251	236.5	508	1165	620	338
118.5	292	186.5	7461	150.5	1236	316.5
536.5	215	102	582	532	1029.5	231
230	647	183	191	2313.5	748	472
661	939.5	155	660	1240.5	1259	378
100.5	222	376	1508.5	353	246	299
179	130	160.5	574	85.5	870	377
555	4802	762	512	568	956	14486
122	302	267	676	205.5	19800	357
67	34	35	68	82.5	1741	546
79	217	323	768	434	31048	236
157	9221	217	1033	503	3650	1184
98.5	616.5	313	157	302	2922	1418
255	492.5	2163	13481	326	1687	798
2742	329	346	785	3803.5	2481.5	664.5
57	103.5	136.75	71	130	307	358.25

53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A	59_Rv1175c_
2188	2435	4661	1721	887	764.5	4600
511	414	1715.5	3389.5	2641	343	2091.5
809	703.5	986	1775	1782	1044	3922
424	420	279	934	484	266	1655
530	621	880	921	1447	344	1223.5
1289.5	837.5	489	2270	1466	3770	10029
1605	10974	572	8649	2443	1129.5	3845
509.5	401	1409.5	973.5	4615	882	2043
1697	1038.5	535	6953	1915	669	3197
1241	2365	904.5	3095.5	1523	2037	6247
2376.5	635.5	30680	1638	1422.5	2248	4776
553	489.5	215	1343	480.5	983	2101
501.5	1454	234	3501	693	690.5	6269
1367	615	41075	1565	785	955.5	2051
758	674	482	1214.5	799	1456.5	3773.5
563.5	300	19534.5	1132	514	500.5	1241
451	218	103	605	220	168	896.5
352	484	134	1125	311	371	2100
1338	591	31659.5	1306	868	774.5	1985.5
748.5	702.5	8883	1422	594.5	1144	4066
1469	1491.5	187	37871	496	225	5840
1205.5	684.5	5390	2416.5	899	496	3212
466	645.5	16397	2096	959	517	1649
607	499	13770	3266	1078	1023.5	2446
2421	576.5	211	970	222.5	262	803
1456	1045	191	22589	418	198	1043.5
5437.5	1070	36891.5	9260.5	986	522	1834
947.5	971	290.5	3335	579	824	3404
770	697.5	18947	3833	1358	1339.5	3356
3932.5	2859	349	2361	769	502	2194
521	303	224.5	1113	328	289	1181
1325	290	128	894	305.5	184	717
479	556	319.5	10060	427	313	1597
319.5	211.5	84	386	146	143	702
456	239	116	721	241	331	1305
2222	398	126.5	2136	527	407	1369
2459	743	32051	2343.5	887	1023.5	3952
467	452	119	1054	377	172	753
365	156.5	48	291	112.5	77.5	277
329	205	207.5	1237	424	265	680
835.5	899.5	606	1399	1062	794	1885.5
501	450	22785	4633	603	1285	4488.5
280	263	106.5	625	275.5	116	610
1048	583	321	818	844	369	753
1492	1337.5	372	2362.5	1113.5	1055.5	4463.5
1878	914	4021	3469.5	2124	1120	4172.5
1747.5	929	865	3119	1332	1289.5	5880.5
448	332.5	130.5	673.5	233	243	1233
596	987	9748.5	2118.5	678.5	1313	21275

252.5	241.5	233	723	418	156	699
854	428.5	3624	899.5	351	763	2391.5
1264	838	22566	1527	789.5	635	1368
2158	1140.5	768	3120.5	1375	1807	5870
485	458	523	967	975	2473.5	16928
374	436	1243.5	1665	446	465	1407
287	252	111.5	1601	360	390	1330
255	191	80	598	181.5	183	585
1506	267	234	947	296	386	816
202.5	194	93	768.5	171	103.5	418.5
1087.5	927	1822.5	1383	648.5	462.5	1860.5
438	248	100	902.5	267	240	1217.5
2037	540	12158	1923	1488.5	2669	5912
2744	602	24110	2417	2189	1258.5	3769
405	252	96	250	222	226.5	491
859	800.5	2922	35658	1360	358.5	1421
883	696	26899	3136.5	756	503	2375
1290	328	192	693.5	465	257	997
1214	19281	3221	1868	519	441	1981
690	592	14577.5	1163	1216.5	838	2432
1010	798	393	1714	741	356	2061
353	337.5	185	664	305.5	210.5	1666
3912	482	34160	1530	944	1793	1915.5
311	298	108	3070	295	169.5	758
5399.5	510	387	1806	1052	215	747
4979	427	517	1413.5	999	601	1824
556	425	175	1242	460.5	337	1018
206	159.5	196.5	562	416	289	456
3169.5	1833	28789	4342.5	1897	1258	4668
252.5	156	72	294	140	205	962
856.5	275	148	1035	419	365	758.5
484.5	678	1130	783	533	705	1638
312.5	273	1137	1235	322	257	702
208.5	2570	54	380	135	115	492.5
484	394	110.5	570	283	172	648
235	372	740	755	402	373	963
1177	363	250	724.5	508	462	4813
841	484	69	695	170	141	1223
1211.5	525	4749.5	1363	705	470	1646
984.5	625	192	1426	444	441	2538
1486	478	8428	30034	310.5	107	404.5
2433	2271	1478	12805	5424	2738.5	6445
5677	506	17089	1900	654	362	1429
2517.5	1145.5	1176	2043	2812	7748	21344
2167.5	420	15899	1050	454.5	280	869.5
554	447.5	34724.5	1181	828	689	4392
1292	2163	16365	3811.5	1616	2063.5	7582
4483	409.5	22600.5	1084	432	269.5	841
1973	1145.5	936	1580	1314	4499	8067
4896.5	492	246	1426.5	541	647	1753

179.5	161	100.5	741.5	200	192	636
1528	836.5	366	2816.5	768.5	341.5	1963
1282	329	134	773	344	222.5	1060
1339	1198	8568.5	6132	4086	3556	10864
1295.5	508	291	1492	736	1207	4706
1346	850	441.5	4505	937	1099	5155
34	28	12.5	53	21	11	61
2395	397	1570	1115	578	544	1049
993	1126	21483	4876.5	1124	763	3742
301	216	105	528	209	175	654
274.5	243	148	821.5	331	134	404.5
1376	393.5	123	27476	294	165	824
1013	445	2382.5	2481	943.5	1362	5446
2329.5	4539	102	1530	307	230	939
112	196.5	45	421	109	138	1268
974	503	30506.5	1095	1026.5	559.5	1095
4347	335	7267	1058	265	203	807
1772	553	930	812	955	1885	2425
1521	632	204	1276	672.5	198	1445
1004	690	356.5	2342.5	1239.5	765	3514
1376.5	635	684.5	1145	522	1116	1972
1030.5	951.5	15407	1424	838	502	1475
967.5	443	4398.5	1380	459.5	420	1754
2755.5	1329	37687	11760.5	6039.5	1359	4140
4873.5	1164.5	47817.5	2651	1406.5	1554	4292
2812	590	1147.5	1467	1281	335	905
676.5	569	966.5	1856	913	444.5	1570
859	497	159	1154	410	656	1319.5
282	301	118	8689	273	294	745
490.5	418.5	200	919	467.5	414.5	1631
291	281	2931.5	1130	349	456	1326
218	267	105.5	359	143	220	946
1438	315	116	752	287	237	2739
3357	309.5	512	1178.5	573.5	278	1045
628	482	1208	918	910	2867	13030
679	222	96	560	257	380	1357
1881	1276.5	29527	6984.5	1265	735	2364
1478.5	1224	233	1420	592	505	2559.5
97	136	34	277	74	82.5	937.5
1261	1567	243	2087.5	844.5	2062	8687
703	323	1272	1074	2122	239.5	969
580	571	1807	1167	3810.5	322.5	1201
1639.5	771	982.5	2237	1451	676.5	3916
613	536	3704	1201	775	633	1498
255	221.5	114.5	572.5	269.5	164	846

60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_	66_Rv1629_A
1922	1149	1159	1660	442	5673	628
266	287	352.5	2649	306	1013	328.5
557	610	691.5	2196	113	1758	1048
266	287	340	426	39	393	5225
348	323.5	603	615	302.5	630	574
775	872	1101	639	55	507	869
837.5	772	1270	1280	75	3096	780
308.5	288	438	799.5	36	213	1498.5
698.5	848	926.5	12527.5	1524	1495	962.5
913	882	1106.5	979	105.5	1797.5	1701.5
7856.5	898	1277	1874.5	61	10925	1023
507	630	742	23073	74	801	1042
647.5	544.5	509.5	681.5	40	422	752.5
818.5	811.5	990	1065.5	15002.5	907	373.5
1783	667	759	674	131	462	617
460	353	341	316.5	47.5	324	315.5
164	204	213.5	616	29	226	170.5
310.5	605	649	336	31	260.5	555
577	685	877	989	10980	905	376
677	766	854	16738.5	55	1019.5	572
211.5	280	338	411	34	364	2307
492	689	805	1389.5	51	8694	1267
387.5	316	505	5073.5	2296.5	379.5	399.5
18198	1243	1077.5	617	2822	507.5	297
416.5	346	506	1124	39	167	240
319.5	461	369	1093	221	204	171
447	529	622	679.5	503	288	350
611	607	658	442	69	426	866
15858.5	1050	1023	4216	370	824.5	8555
659.5	636	717	891	62	662	1149.5
230	324	375	825.5	44	268	210.5
221	257	321	276	33	279.5	269
225	308	434	554.5	90	362	237
207	199	241	335	40	193	242
264	259	275	2602.5	31	236	322
198.5	268	298	788.5	40.5	259.5	1967
839.5	907.5	930	5338	92	638.5	14725
211	298	406.5	458.5	54	432.5	253
98	106	124	196	43	146	119
360.5	203	248	423	574	894	137
21148.5	718	1169	4721	51	511	343.5
346	456	490	697	104	287	304
155	206	249	423	38	988	134
777	437	594	675	50	435	350
1690.5	806	935.5	1051	60	640	529
1159	1062	940.5	3000	4879	1312	1356
3639.5	1249.5	1391	1407.5	78	2377.5	2660
309	245.5	362	659	49	334	417
449	516.5	597	8820	56.5	255	394

155	212	240.5	891	107	1996	210
282	350	355	7782	175	19869	196
468.5	640	643.5	4824	377	593	390.5
11648	2073	1956	6608.5	7465	2850.5	634
486	525	652	6601	46	591	1913
286.5	399.5	424	560	45	534	623
225.5	343	314	346	109.5	199	234
132	156	177	436.5	30	126	166.5
171	204	204.5	370	37	1772	143
192	158	182.5	349.5	29	149	182
769	606.5	638	588	64	630	481
361	210	233.5	401	35	1119	149
10912	1014.5	1185	765	40	438	391.5
6072	682.5	832	573	57	1049	617
105	181	268	251	25.5	156	160.5
244	439	455	385	39	273.5	319.5
554.5	616	757	1056	800.5	630.5	643
467.5	324	353	343	45	337	255
1567	449	484	772.5	52	296	305
685	893	1036	1725	32985	1213.5	375
879.5	593	710	2363	116	626	622
249	258.5	351.5	13984.5	62	443	254
433	556	560	335.5	45	299	491
369	192.5	263	1940	196	1706	159
262	340	441.5	742	49	768	240
10708	679	835	440	37	670	198.5
365	360	526.5	688	54	484	602.5
180	248.5	282	1006.5	4304	205.5	558
6929	1686	1741	2383	132	1748	935
183.5	148.5	300	552.5	67.5	231	338
208	235.5	274.5	740	48	205.5	199.5
486	719	787	1172.5	23995	929	275.5
229.5	271	351	327	48	216	226
150	111	119	207	25.5	67.5	119
320	220	255.5	336.5	54	417	256
204	198	259.5	818	825	279	1176.5
381.5	383.5	411.5	2425	661.5	798	300
221	201	213.5	573	76	391	166
331	314.5	394	1236.5	55	481	713
779	692	624	2156.5	171	671	344
90	122.5	140	602	28.5	2204	89
8793	2472.5	2605	4487.5	126.5	2646	4184
258.5	242.5	272.5	461	170	304	281.5
1718	2364.5	2905.5	878	41	1353.5	1260
306	339	1480	898	40	383	273
3411.5	651	635.5	475	40	376	306
1709	2010	1884	1831	103	2306.5	2628.5
299	865	896	339	37.5	184	222
554.5	900.5	981	717	2581.5	3192.5	335
425	515.5	521.5	713.5	9200	516	275

133	163	226.5	335	139	294	203.5
316	495.5	646	1037	77	882	345
302	400	388	479	42	13111	239
1140	1144	1224	644	55	1384	4735.5
404	481	492.5	18671	54	390	905
663	778	939	1009	196.5	2860	530
20	22.5	22	49	16	15	14
365	389	425.5	494	544.5	546	337
1305	1362.5	1243	2776.5	109	1423	3733
170	192	242	350	232	465	221
138.5	152.5	189.5	1287	32	207.5	214
789	176	331.5	586	28	5642.5	128
363	440	478	503	1942	569	206
203	213.5	248	4158.5	651	167.5	193
150	127.5	138	3868	22	162.5	78
1870	540.5	663.5	851	110.5	973	281
277	218	274	10082	30	366.5	346.5
14485	1255	1286	2019.5	6872	1298.5	385.5
375	392.5	521.5	762	55	460	3531
1328	795	865	827.5	126	2540	2004
649	1229.5	965	2232	34690	1860.5	396.5
459.5	565	1085.5	908	5114	571.5	349
1086	440	489	973	4655	579	383
962	813	735	721	76	1685	333
1771	1324.5	1158	1576.5	221	656	1334
380	589	820	895	61	585.5	370
652	554	692.5	1223.5	69	1502	963
383	346	408	446.5	44	269	447.5
1559.5	276.5	320	593	50	182.5	397
1851	407	504.5	1164	64	310.5	455.5
3552	359.5	284	1358	42	226	548
131	151.5	207	636	70	639	152
341	276	286	303.5	65	340	215.5
610.5	427	520	602	62	1170	493
436	655.5	692	485.5	58	312	362
156	200	205	471	140	316	201.5
646.5	990	1082.5	1756	382	1027	517
2213	1303	1479	2191	51	376	574
76	67	81.5	234	22	61	98.5
663.5	835	805	1594	417	1746	307
194	163.5	193	447	56	621	197
397	457	580	636.5	46	304.5	1186
377.5	480	620	1176	61	819	409
3005.5	617.5	640.5	587	57	972	379
153	210	306.75	337	24.75	218.25	233

67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A	73_Rv1984c_
856	452	495.5	141	898	636	714
620	734	244	106.5	136	354	376
1148.5	755	543	254.5	5348.5	765.5	805.5
488	291.5	327	106	170	486	602
921.5	308	302	117	318	569	617.5
1076	3878	568	143	482	912	1058
1250.5	326	554	147	425	1573	1215
499	1364	302	280	112	450	1373
1397	3328	411.5	345	656	770.5	738.5
4068.5	1182	618.5	307	782	1109	1209.5
892	694	664	269	3755.5	877	5469.5
608	339	412	165	134	454.5	526
438	207	362.5	108	1355	445	485.5
550.5	335	1203	234	746	689	690
1223.5	15381.5	666.5	375	2198	618	812
1890	137	227.5	94	130	364.5	282.5
268	173	175.5	63	542	197	312
8303	459	931	161	2041	705	785.5
446	852	548	322	811	626	1280
9329	1351	919	1147	289	971	854
3075.5	794	466	241.5	1568	528	611
16795.5	6704	1679.5	3173.5	1199	1442	1457
418.5	28432.5	346	275	762	693	391
355	573	334	153	237	732	387
178	523	91	148.5	184	359.5	129
295	216	138	71	321	287	187
448	204	295	102	312	599	420
1037	7661	650.5	511	698	673	875
7093	25550.5	989	282	1393	972.5	945
1343.5	5228	1823.5	957	13929	1247.5	2858
271	155.5	208	93	1259	275	911.5
293	329.5	228	76	704	361	345
384.5	421.5	212	221.5	1118	438	475
227	165	192.5	62	143	292	323.5
279	127	247	210	256	319	316
249.5	189	208	117	500	290	270
739	757	1151	266	2017.5	988	1241
343	500	189.5	211	1145	485.5	308.5
126.5	89	65	118.5	108	134	94
218.5	179	124.5	827	399	199	194
494	324	352	176.5	324	484	372
376	350	374	205	2398	584.5	474
180.5	207	108	70	346	280	163
399	635	261	140	4006	590.5	418
569	368	448	141	209	714	474.5
19350.5	757	2593	377	2156	1361.5	1470.5
1080	2333	793.5	644	170.5	1087.5	1284
367.5	169	244	280	145	449	415.5
1157	216	330	258	1074	524	415



265.5	407	287	156	5299	329	793
354	114	149	48	104	236	284.5
467.5	10551	335	141	211	569	505
1240	648	840	888	235	1272	844
1962	731.5	431	103	514.5	515	517.5
10494	9899	1051	479	407	896	642
348	98	130	138	141	373	213
285	98	102	61	289.5	226	241
188	291.5	118.5	812	159	214	204
256	194	153.5	90	1942	227	244
684	596	494	107	301	660.5	478
196	113.5	109	92	207.5	210	167.5
596	1058	408	109.5	590	582	1305.5
6752.5	1420	676.5	131	610	764	875.5
268	74	85	111	229.5	322	245
287	2044.5	187.5	132	647	344	259
846	249	413	226	238.5	659	403
330.5	282.5	233	130.5	849	390	503
430	258	333	452	823.5	445	457
457	6288.5	405	198	312	633	469
715	308	485	670	1720	675	505.5
418.5	1358	362.5	123	701.5	407	626.5
9269	3848	709	87	287	651	575
1603	96.5	182	87	201.5	366	479
261	238	182	118	1322.5	462.5	307.5
462	4422.5	705	149.5	1790.5	412	344.5
607	234	348	208.5	158	636.5	1661
168.5	226	159	171	1542	166.5	225
1127	546.5	1024.5	609	1104	1463	967
168	207	99	124	410	249	156
290	351	122	123	173	259	170.5
389	869	428.5	284	329.5	434.5	382
295.5	333	302.5	6292	323	506.5	413
152	138	150	34	3659.5	175.5	188
280	10852	194	130.5	274	279	291
363	311	149	92	167.5	210	291
317	2435	304.5	555	2226	425.5	300
189.5	217.5	159	6190	1048	207.5	572
392	351	228	995.5	514.5	392	329
641.5	371.5	392.5	509	244	672	396
141	203.5	106	53	3466	140.5	159.5
2239	10540.5	3998	1743.5	33307	3056	6366.5
238.5	385	199	86	162.5	271	247.5
1815.5	1278	954	347	102	2435	4430
270	205	187	165	240	3858.5	269
519	247	320.5	88.5	130	485	430.5
2908	4033	3876	1948	33745	2313	6823
288	157	209	84	280	329.5	311
475	518	321	150	733	540	377
301	279	298.5	426	417	432	455

159	131	129.5	248.5	611.5	264	175
388	224	206	258	365.5	526	391.5
403	342	243	7725.5	1882	317	641
1452	6305.5	859	176	818	997	1186.5
447	389	292	132	2597	513	516.5
695	772	622	405.5	804	913	758
20	14	11	8	31	20	14
404.5	406	441	262	2252.5	413	571.5
13687.5	6750	6202	2029	36373	2674	6882
194.5	1139	138	72	190	249	294
158.5	183	107	76	108	218	180
347	108	112	127	348	248	591
326	1695.5	226	144	521	352	400
163	259	157	84	309	191	209
125	59	58	90	84	129	79
305.5	292	256	121	841	470.5	367
231.5	148	174	451	130	297	406.5
586	503	578	205.5	2014	469	594
393	223	204	213	146	475	259.5
8309.5	5104	3124	35635	4976.5	1419	4082
393	942.5	423	203.5	150	495.5	482.5
479	275	287	377	703	879.5	606
310.5	193	226	238.5	397	379	325
864	7166	560	905.5	307	789	672
19834.5	595	1695.5	325	939	1342	1340
433.5	289	279	128	366	775	312
659.5	2764	1631.5	735	31071	973	3146
790	2372	258	276	675	368.5	420
223	162	231.5	180	106.5	221.5	246
409	219.5	267.5	180	444.5	424.5	1717
7059.5	495	838.5	127	226	578	596.5
217.5	278.5	156	85.5	1798	161.5	288.5
258	427.5	149	206	235	334	344
234.5	492.5	259	143	2143	217.5	393
511	553.5	406	22866	173	717	629
236	390	270	6627	1534.5	232	429.5
981	345.5	573	370	394	887	671
1111.5	212	534	115.5	142	498	305
65	191	43	68	339	49	76
577	445	309	133	3714.5	328	452
211	936	211.5	289	2087	201	284.5
368	717	257	169	677	502	439
439	17218	303	4918	390	612.5	495
1544	292	310	766	476.5	576	380
248.25	70	130.5	37.5	130.5	195	308.5

74_Rv2031c_	75_Rv2094c_	76_Rv2151_A	77_Rv2252 lo	78_Rv2282c_	79_Rv2282_A	80_Rv2544_A
125	653	309.5	708	409.5	1790	509.5
30	179.5	225.5	385	189	625	2105
112	467	191	886.5	425	1813	1139.5
71	354	164	480	235.5	689	312.5
84	213	481	481.5	461.5	914	1386
300	12938	607.5	1574	897.5	2179.5	1003.5
800.5	971	239	1564	730	3925	666
121	974	162	441	265.5	976.5	1767.5
98.5	555.5	2460.5	1188	849	2413	614
106	1774.5	6005	2427	1396	1292.5	1096
96	1847.5	324.5	928	556	902.5	858
63	418	568	565	319	557	252.5
42	234	123	528	299	612	241
1165	290	306	782	525	818	292
2055	817.5	203.5	747	754	775	608
49	339	904	421	247	373	186.5
28	148.5	54	251	166	281	137
64	404.5	1010	498.5	336	666	221
117	498	207	662	423.5	817	310
154.5	2080	189	892	531	1301	364
42	375	125	462.5	330	730.5	182
2359.5	846	204	1012	781	1139	529.5
81	386	99	506.5	430	655	188
12982	329	112	839.5	1301	948	892
29	205	617	235	183	593.5	126
114	142	66	336	170.5	913.5	138
69	331	159.5	594.5	363	602	246.5
73	1160	155	690	376	857.5	483.5
89	651	173	1003	584.5	942	678
186	1126	293.5	1056	823	1565	437
41	209	73	390	210	547	151
56	354	88	405	183.5	398	156
40	434	86	613	300	555	195
153	243.5	58.5	310.5	178	325	121
44	246	88	271	287.5	472	159
34	868	271.5	387	258.5	339	168
34298	998	259	2037	3899	2486	1057
2294	172	173.5	695	585	413	194
22	80	34	171	78.5	186	56
1303	466	65	412.5	215	213.5	370
1066	374	105	588	486	676.5	893
83	1717	97	4743.5	329.5	582	252.5
40	137	85	319.5	161	271	104
58	239	105	532	354	479	387
150.5	243	141	690	436	686	327.5
974	1000	130.5	1245	716	1634.5	1169
159	1504	343.5	1426	1275	1905	1244
58	221	94	362	205	460	241
791.5	1600	100	522	447	473	459

79	139.5	81	315	179	364	250
24	733	54	354	161	320.5	207
1268	531	466	743	928	633	321
1084	496	560	1540.5	987.5	2848	775
60.5	341	81	658.5	364	611	597
4030	566	94	565	446	728	215.5
79	398	76	273.5	151	282.5	157
110	3228.5	66	285	162.5	244	110
88	334	63.5	251.5	147.5	219	176
164	197	85	295.5	137.5	207	130
421	398.5	655	1141	596	605	353
50	472.5	108	364	230.5	1071	148
44.5	1137	187	775.5	480	766.5	1095
285	2071	149.5	715	441	695	1343
66	311	61	451	180	163.5	108.5
53	644	214	350.5	280	325	192
91	344	264.5	977.5	486	804	306
35	168	84	717.5	314.5	354.5	235
44	446	95	546.5	310.5	707	269
91	255	151.5	589	380	765	649
151	383	307	729	440	842	484
37	181	238.5	445	251	496	221
36	507.5	127	616	327.5	650	509
27	203	78	367	150	307	98
89	172.5	234	453.5	272	523	658
69	299.5	344	408	294	607	710.5
1745	237	113	521	398	566	248
174	292	909	256	275	325	96
236	661	577	1852	958	2038	837
44	414	50	212	109	306	83
41.5	268	86	283	147	292	184
3569	268	880	523.5	610	697	191
43.5	174	263	314	213	406	207
32	127	34	200	101	217.5	69
39	184.5	103	323	163	293	131.5
515	310	206.5	302	152	322	276
69	500.5	856	439	397	565	240
66	126	69	274.5	135	334	89
761	389	113	483	288	436	347
76	288	201	1109	520.5	1156	271
32	142	57	189.5	98.5	249.5	110
364	778	911	2172	1946.5	3868	1178.5
45	401	79.5	381	194.5	458	181
42	9585	150	3105.5	1762	2510	2235.5
71	385	106	433	254.5	1295	176
44	351.5	149.5	544	335	525.5	341
892	1033.5	572	1976	1673.5	3143.5	873
2226	360	235	441	441	450.5	208
72	754	124	730	447	812.5	857.5
8747	367	280	604	865	697.5	343

120	285	321.5	219	168	262	116
97	426.5	240	685	418	764	288
34	139.5	163	353	226	432	132
80	3351	156	1227	761	1262	1064
187.5	1884	123	650.5	305.5	729	415
86.5	705.5	333	898.5	600	1024.5	459
7	19	11	33	19	30	10
4943.5	246.5	127	509	454	613	320
535	1269.5	589	1911	1566.5	3058	866
30	178.5	64	341	206	227.5	145
33	151	117	318.5	145.5	235	155
38	131	107	209	135	305	117
224	699	126	531	259	634	342
4302	289	90.5	374	468	360	190
13	44	29	118	64	117.5	45
173	376	239	471	307	535	428
62	238	76	367	199	363	129.5
6003.5	363	128	637	1027	911.5	762.5
74	185	451	744	360	688	236
7479	556	243	1273	2000.5	1855	695.5
3463.5	207.5	135	548.5	532	722	238
200	348	246	837	424	1590	326.5
72	386	225	949	239	464.5	250
1522.5	471	151	1393	729	985	342
130.5	1260	450	1168.5	915.5	1464.5	581.5
50	245.5	144.5	656	423	574	377
199	346.5	810	833	759.5	1259	373
82	185	3990	396	471	505	212.5
18279	334	124	665.5	1767	1718.5	370
70	241.5	3127	502.5	485.5	599	300
5665	725	62	486.5	495	511	268
90	1181	61.5	184	143.5	237	105.5
38	462	103	407	198	277.5	156
29584.5	350	120	779	2818	1031	740.5
62.5	844	102	929	427	669	572
230.5	752	103	261	175	306	152
180	590	432	1222	750	1653.5	514
62	215	300	668	325	1566.5	300
30	86	36	77	44	80	41
35.5	568.5	58	502	247	1130	524
51	207.5	80	318	164	325.5	1342
53.5	392	269.5	565	284.5	578	1871
66	1533	919	775.5	477	728.5	715
73	1114	133	663	349	507	339
40.5	286.25	36.25	295.5	143	337.75	175.75

81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A	87_Rv2984_A
98	771	862	141	426.5	3297	828
71	441.5	2695	93	243	5083.5	577
155	799.5	1599	260	622	3754.5	1134.5
1221	493	497	115	195.5	1670.5	728
291	771	1307	168	543	2986	818.5
858	1010	941	348	2635.5	4583	1095
1386	1740	983	313	496	4340	2471
99	536	3889	100	807.5	3161	821
369	921	1347	412	784	8602.5	1268
310.5	1233	1764.5	548	1201	8868.5	1323
300	890	1097	140	604	4396	1032.5
84	543.5	494	1234	520	2549.5	834.5
74	459	467.5	141	174	2988	557
93	963	476	234	431	1978	982
141	559	593	640	1403	2615	728
82	467.5	293.5	470	353	826	512.5
50	432	310	17040.5	17495	930.5	296.5
229	413	334	80	220	1490	617
529	898.5	655	257	363	1715	978
112	924	713	171	823	2637.5	1290.5
76	307	258	108	268.5	1667.5	438
109	1186	796	13140	591	2886	1403
184.5	652	346.5	99	242	1367	1237
82	829	805	241	321	1271.5	1386
88	303	149	79.5	122	687	298
67	257.5	227	106	131	1461.5	490.5
86	784.5	507	262	358	2069.5	785
135	761	557.5	2377	578	3300	891
178	920	893.5	248	418	4048	909
261	864	679	366	451.5	5442	1335.5
190	346	305	451	256	2253.5	558
148	366	220	98	175	803	1092
76	543.5	394	858	5638	1967.5	663
109	288	175.5	200	534	820	396
72	352	220	65	268	1434.5	456
147	277	235.5	750	294	1609	366.5
113	1144	888.5	599	1668	3083.5	1525
61	382	255	92	141	1551	516
38	144	87	69	46.5	537	205
59	222.5	363.5	1059.5	219	654	233.5
107	792	1086	34345	23050	6004	706
77	694	390	117	6100	1978.5	845
83	381	196	126	132	1015	374.5
106	547	664	4566	189	1819	763.5
119	698	619	225	278	2831	929.5
142.5	1005	1795	4516	588	3505.5	1152
1948.5	1611	1598.5	31763	19639	4683.5	2258
77.5	508.5	284	93	256	1159	633
81	595	450	427	359.5	3445	619

130	334	335	107	117	1722	497
42	255.5	292	55	744	770	333.5
463	815	601	9771.5	5647.5	4917	820
297.5	1456.5	1201.5	524	8595	7145	2895.5
511.5	530	694	114	1163	2319	666
128.5	435	339	3478	280.5	2138	551
78	385	202	790	183	5423	549
79	241	176	1894	122	2297	354.5
634	256	294	1328	201	1888.5	257
54	280	177	74	112.5	3900	279.5
157	692	652	336	314.5	5153	772
100	353	584	256	233	1663	325
144	777	934	178.5	7173	4058	792
266	782.5	1727	219.5	578	1709	1136
66	283.5	204	73	177	558	549
84.5	404	207	80	229	1740	521
338.5	831	583	364	577	3031	1232.5
61	449.5	525	2353	25516	990	577
237	575	471	9249	6186	4669	889
162	782	1120.5	174	1294	3025.5	1033
287.5	677	679	271.5	329	4079	970
573.5	348.5	311	2662	1554	1738	477
70	599	564	135	6000	1770	558
56	355	166	259.5	281	1301	455
229	407	987.5	183.5	8836	1969.5	592.5
59	449.5	551.5	243	254	1115.5	485
96	653	451.5	8434.5	599	1742.5	853
134	200	154	750.5	1250.5	1738	433
615.5	1893	1341	11572	3773	8194	2440
47	325	113	576	174.5	939	282
211	254.5	214	80	175.5	2377	342
73	474	370.5	192	1417	1702.5	721
111	525	267	198	201	2876	755
25	164	85	33	81	1268	183
164	306	268.5	582	177	3575	398
2029	284.5	378	307	191	1211.5	367
212	433	361	189	208	1253	714
59	183.5	148	154	258	1045.5	217
571	385	432	2299	4814.5	2113	482.5
117	790	472	173	660	6522.5	1428
46	143	193	2216	128	681.5	160
391	2661.5	1661.5	4992	4288	10404	3733.5
251	365	260	159	434	1274	413
1151	3120	2621.5	451	14944.5	5548	2675
92	3636	325.5	443	958	1693	7360
81.5	749	534.5	209	268	1839	741
570.5	1648	1183.5	629	1444	13771	2800
66	402.5	245	200	167	894.5	483
107	701	1012	165	1788	3121	984.5
83	818	546	43219	12024	1640.5	716.5

50.5	374	321.5	461	542	5590	491
105	556.5	473	311	301	3645	735
123	318	319	123	152.5	4148	440.5
129	1006	949	217	5957	3062	1233
88	527	548.5	86	646	2612.5	601
287	972	706	1946	1997.5	3332	1324.5
10	26	16.5	9	9	54	33
75	825.5	610	41260	17391.5	2972	769
427	1702	1069	376	20030	11179	2494
169	507	310	28340	477	6073	320
79	224	221	53	294	1044	268
54	502.5	830	42.5	101	1841.5	317
307	455	413.5	224	1493	3068	539
51	224	183	3565.5	224.5	3766	274
23	131.5	79	371	88	1150.5	146
779	586	631	524	210	3079	631
69.5	324.5	200	107	343	1218	440
90	493	662	797	438	1721	664
119	507	492	1125.5	312	3077	722
144	1030	864	2502.5	667	6631	1440
113	452	368	643	1931	2791	570
149	1080	556.5	1627	980.5	2990	1114
86	466	368	1161	7727	1819.5	510
125	1049	603	342	279	1748	1184
149	2179.5	1011	31440	15072	6380	1294
169	654.5	911.5	493	521	2774	1075
261	770.5	827	19823	7001	25632	1099.5
908	411	310	243.5	230	2741	503
42	248	249	145	265	924.5	390.5
194.5	514	407	455	390	3375.5	760.5
59	325	303	158	237	1008	328.5
344	162.5	172	56	153	2577.5	233
191	423	688	142	165.5	2100.5	547
78	395	563	16738	1025	1198	557
86.5	505.5	563	1370	3419	2433.5	682.5
74	202.5	202	61	759	2067	288
168	1583	1079.5	43288	30103	4624.5	1566.5
106.5	464	466	691	201	1938.5	545
71	58	48	28	846	249	76
65	305	461	653	1532	1951	385
263	209	1887	80	138.5	2169	245
138	486.5	3377.5	114	197	1650	584
1413.5	562	1033.5	3287	2146	6444	858
143	511	488.5	232.5	355	4755	673
40.25	280.5	214.5	42	165	787	353.75



88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A	94_Rv3319_A
279.5	1113	1447	657.5	6476	3731	314
220	620	770	371	1463	589.5	178.5
382	3070	1529.5	825.5	3397	988.5	510
250	802	975	512.5	1153	429	201.5
339	1308	918	642	930.5	581	234
442.5	1015.5	1483	901.5	1583	979.5	461
410.5	1446	3144	1667	2763	1374.5	758.5
530	523	884	426	2807	441	207.5
885	1415	2159	930	6583.5	2624	807
721.5	1115	2097	1156	1647	1231.5	1017
375.5	833	1536	868	2238	859	617
663	1202	897	677	5282	717	2905
173	663	1277	491	1119.5	670	294
462	1353	1054	869	1363.5	910	772
333	869.5	872	596.5	943	767	439
188	514.5	494	353	870	471	1076
277	443.5	364	238	524.5	307	230
2246	622	759	432	7884	515	9851
492	1775	1025	799	1399	834	504.5
706	2997	1671.5	957	2200	1196.5	866
211	967.5	623	367	584	375	255
428	1285	1626	987	1750.5	988.5	554
238	717	1267.5	715	9249	578	321.5
335	766	1464	875	975	624	341
114	261.5	569	292	453	391.5	174
123	349	641	256	1284.5	1524	140
311.5	858	866	644	1161	645	343
355	764.5	1312.5	670	4139	687	475
434	1035	1272	803	1427	955	603.5
565	2138	1258	822	1629	911	446.5
235	1775.5	711	474	1134.5	571	216
1483	398	565.5	372	2256	422	210
238	938	753.5	426	890	567	210.5
200	494	547	284	636	329.5	202
153.5	371	505	329	775.5	336	175
133	585.5	521	295	1528	439	156.5
1033.5	3081	1676.5	1205	2551.5	1274	979.5
157	633	711.5	375	624.5	547	153
63	180	301	140.5	313.5	227	84
96	409	327	197	451.5	367	183.5
486	1108.5	933.5	578	1460	700	393
246	1463.5	787	637	681	542.5	247
116.5	490	429	250	1624	455	136.5
216.5	729	875	568	4259	678.5	345
300	1369	1322.5	701.5	1110	871	319.5
2075	1380.5	1982.5	967	4860	1854	917
1370.5	6016	2557	1514	3733	2487	1612.5
238	392.5	786	483	1131	419	269
248	643	782	448	830	568	302

171	546.5	621	273	557.5	320.5	120
132	364	494	257	532.5	350.5	135.5
368	1179	1077	600	1349.5	934	321
1603	8391	2764	1621.5	4370	1968	1249.5
270	699	979	565	966	619	292
231	741.5	665	408	908	573	337.5
174	414	640.5	437	1983	383	184.5
133	302	377	191.5	524	292.5	94
103.5	253	371.5	197	1448	348	119
162	312	461	218.5	433.5	281	222.5
301.5	811.5	1352.5	656	4741	784	776
131	354	374	203	494	392	124
336.5	892	1055.5	706	1285	982	541
622	617	1193	659	20975.5	824	553
1465.5	234	413	251	314.5	315	60.5
294.5	380	652	342	594	368	266.5
526.5	2861.5	1322	921	1978	1099	396
389	526	578	344.5	1519	457	329
459.5	1230	979	620	4273.5	832	403
401	1815.5	1034	798.5	1455	830	324
327	1197	1367.5	680	1651	1142	366
140	531	660	382	613	410	146.5
289	516	842.5	538.5	4451	598	440
109	410	478	315	1323.5	298.5	144
213	586	750	399	776	615	186.5
201	422	698	424.5	693	557.5	280.5
266	951	1156	657	1072	635	264
323	967	341	161	398	228	115.5
1153	4326.5	2939	1864	6013	2647	1088.5
85.5	431	310	268	287	281.5	110
151.5	434	416	238	483	349	149
444.5	1315	723	538	1315	619	323
210	1759	857	489.5	557	438	272.5
56	198	375	156	284	176.5	66
146	443.5	600	256.5	473	355	123
140	324	635.5	243	2002.5	380	132.5
1295	679	697	457	590	497.5	458
138	300	392	158	466	411	91
197	642.5	678.5	376	1068	674	283
647.5	3853.5	2001	897	2189.5	1083	501
61	211	209	119	272	158	67.5
1684.5	5509	3820	2614	3254	2392	1591
187.5	691	561	288	676	386	214
1185	2102	2726	2695	2844	2344	1410
305.5	1966	7256	3943	666.5	995.5	199.5
339.5	669	947	633	870	567.5	559
1550	5265.5	2837	1807	3467	2061	1084.5
224	2086.5	592	360	644	413	274
535.5	1836	1302	756	1773	829	397
480	673	743	527	4705	519	534

326	403	391	260	361	281	202
237.5	1773	1117.5	498	1154	722.5	181
173	658	568	281	545.5	345	149.5
805	1596	1560	1067	1347.5	1218	752
177	699.5	1025	500	849	573	245
613.5	2557	1538	1158	3350	965.5	674
11	33	49	23	72	49	13
673	673	692	429	997.5	579	360.5
1260	4656	2246	1534	2617	1821	915
246	6279.5	355	237	480	363	184.5
109	399	350	215.5	418	360.5	204
94.5	432	301	283.5	376	330	110
213.5	603.5	723.5	387	751	523	329
161.5	443	366	214	7162	353	217
43	126	243	98	178	123	44
240	1113.5	760	477	732	518.5	185.5
171	403.5	547	291	3487	341	160
361.5	692	699	554	3346	690	396
277	1570	861	531	1157	756	288
719	1774.5	1434	1065	1801	1023	635.5
240	763.5	713	525	2852	682	206
272	1944	1207	981	5756	1070	221.5
190.5	548	682	418	1339.5	992	468.5
750	2351	1553	817	1147	1156	777.5
1011	1248	1627	1204	12702.5	1351	1020
280	1561.5	1131	724.5	1114	743	212
597.5	2756	1211.5	705.5	1465	897	910
233	481	589	366	4239.5	444	255
199	404.5	370	256	511	326	215
564.5	522	726	417	1505.5	494.5	186
185.5	464	491	301	554	365.5	272
75	270.5	323.5	162	8334	254.5	131
144	545.5	632	311.5	828	357	161
412	767	363	278	603	347	229
216.5	782	1030.5	521	912.5	552	230
125	435	366.5	208.5	673	359	195.5
1157	2493	1816	1041	2982	1964	1193.5
188	690.5	2153	566.5	3143	1669	443
32	93.5	121	60.5	193	104	50.5
122	510	927	341	1610	2555	196
186	298	409	180.5	502.5	288	146.5
167.5	757	862	496.5	721	658	187.5
377	1331	1109	616	2372.5	904	303.5
900.5	1259	1013.5	503.5	1169	648	315
113	322.5	514.75	257	521.75	275.75	133

95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_	150_Rv3495c_
1776	1960	640	1212.5	628	702.5	579
593	513	378.5	817	275	378	1044
1123	1067	682	1300	563	661	3522
682	779.5	399.5	717	303	451	221
1020	627	598	957	306	678.5	216
1240	1200	913	1975	879	842	3436
1934	2016	1855	10552	1048	1647.5	1077
601	594	436	1739.5	329	426	1154
2035	1530.5	857	1305	817	923.5	750
1610	1435	1058	9582	1090.5	1016	1489.5
1281	1267	832.5	1038.5	693	808	550
1209	1151	580	698.5	601	666	1025.5
11098	1345	430	742	12166	2128	248
1623.5	1143	928.5	949.5	773	1120.5	1164
945	845	576	806.5	523	583	1217
538	508	407	900.5	278	389	307
422	442	197	742	180.5	214	136
965	1165.5	447.5	924	348	411.5	199
1436	1008	758.5	1053	792	1028	1141
2484.5	2338	1208	1533	736	1023	511
612.5	687	386	1674.5	271	352	191
1582.5	1302.5	899	1676	599	1113	502.5
1355	1023	605.5	1311.5	330	657	208
913.5	593	661	491	409	765	322.5
347	241	588	556	432	363	298
473	410	300	494.5	267	312	152
1035	830	619	687	601.5	737	649
1110	1023	644	1906	585	703	397.5
1387	1488	762	1319.5	667	835	443.5
1741.5	1434	1044	3501	790.5	879	412.5
1072	880.5	476	793	644	656	1397
456	448	331	1076	330	343.5	136
763	711	447	6878.5	301	548	223
408	350	283.5	392	266.5	287	172.5
469	397	354.5	808	705.5	386.5	209.5
650	627	289	924	225.5	311	150.5
2373.5	2212	1279.5	2255	1137	1230.5	1960
630	762	411	383.5	260	384.5	198
240	255	128	618	104	148	64
291	303.5	176	262	186	188.5	164
884	800.5	550.5	1082	434.5	593	290
795	539	522	602.5	409.5	589.5	536
420	325	370.5	298	180	390	208
810.5	659.5	555	781	459	677.5	431.5
1236	997	707	908	743	735	349
2291	1931	922	1426	697	864.5	489
3812	3793	1735	2397	1317	1489	914
529	609	398	2899	474	470	165
657.5	623	469	742.5	324.5	477	253.5

480	376	319	908.5	197	284.5	118
487	374	249.5	1042	260	332	555.5
906.5	782	590	762	455	597.5	339.5
5069	4317	2404.5	2015	1754	1773	1801.5
983	715.5	509.5	1129	563.5	657	940
802	858	446	552	304	427.5	218
514	405	328	322	397	387	245
306.5	270	232	255.5	145	250	99
331	269.5	206	619.5	173	219.5	135
287	263	206	280	169	225	97
1002	799	789	791	561	673.5	345.5
419	325	246	273	251	270.5	183
1143	961	569.5	1030.5	693	788	1433
1326	1153	668	1055.5	462	581	551
240	222	280.5	349	176.5	280	133.5
402	352.5	294	709	212	349.5	261.5
1941	1547.5	965	1195	1271	1145	2092
712	538	368	746.5	278.5	366	273
1206	1157	598	1642.5	687.5	777	1085
1311.5	1232.5	793	955	857	1036	1518
1181	971	751	954	615	794	428
606	585	351	967	254	436	147.5
960	905	547	653	382	482	239
766	402	275.5	1250	215	309	136
562	523.5	470	412	343	438	176
552	621.5	541	590.5	463	455	340
797	652	600.5	737	533	690.5	336
264	271.5	173	271	150	168	155
3796	3014	2104	2000	1682	2082	2125
580.5	204	293	299.5	103	321	154
400.5	324	266	274	197.5	270.5	146
1213	976.5	568	617	773	1003.5	1220
507	421	433	517	286.5	488	157
213	202.5	186	918	103	153	91
394.5	334	311	408.5	212	302.5	155
414.5	408	200	4410	158	217	126
713.5	612	399	380	273.5	453	193
372	317.5	172.5	584	166	178	88
644	643.5	380	412	277	373	214
2392.5	2097	1216	1187	1171.5	1180	2117
218.5	224	124	175	92.5	123	71
4145	4213	3082	2017	2362.5	2666	1099
582	594	294	495	254	362	710.5
3162	2489.5	2202.5	4211.5	2612	2571.5	11284
2970.5	550	2565	488	805	3399	237
913	698	563	6123	483.5	618	248.5
3610	3818	2148.5	1478	1848	1763	840.5
556	506	314	499.5	283	364.5	160.5
1496.5	1543	765	1473	979	959	2307
826	866	438.5	969	575	479	236

383	315	242.5	222.5	148	262	480.5
1031	1080	571	815.5	393.5	498	253
426	410	352	356.5	254	306	120
2000	2272	1155	2162	824	1142	3709
782	812	616	6827	348	537.5	426
2317	1888.5	1099	1657	1470	1585	3617
40	39	23.5	26	15	27	16
805.5	700.5	415	1277.5	383	430	230
3411	2617.5	1956	1512	1675	1591	592
356	373	217	475	193	235	145
329	304.5	242.5	242	158	241	104
561	227	290.5	236	109	368	80
892.5	676	413.5	4554	266	460	674.5
443	493	218.5	342	126	204	163
150	178	111	104	295.5	139	87
671	541.5	541	620.5	385	482.5	201
502	514	282	505	257.5	304	118
905	1020	524	800	453	473.5	349
1117	984	575	534	460	563	451
1757	1564	1023	1058	869	956	393
1238.5	1274	478	608	382	433	241
2381	1379	965.5	1058.5	400	1245	277
662	594.5	422.5	837	359	387.5	193
2209.5	2782	1109.5	646	482	841	387
2247	2287	1346	2048.5	848.5	1166	621
1121	588.5	747	648	625.5	753	284.5
1571	1496	781	1384.5	621	685	416
516	586	339	617	340.5	421	177
357	361.5	213	433	204	268	212
690.5	491	445	3060	340	410.5	242
592	701	272.5	598	199	325	189.5
277	319	228.5	666	128.5	175	154
397	408.5	362	2002	253	391	174
452.5	467	264.5	394	224	267	176.5
705	688	467	1380	506	604	1581.5
326.5	344.5	228.5	281.5	265	226	181.5
2283	2034.5	1248.5	3339.5	807.5	1004	582.5
1031	1605	560	646	836	531	249
111	117.5	62.5	97.5	46	61.5	46
859	1024.5	290.5	775	344.5	339.5	465
702.5	520.5	205.5	1733.5	326	224	156
778	581	559	1035	384	590	225
1067	855	602	897	643	586.5	486
845	688	555	693	384.5	557	299
392.25	447.5	287.5	343	202	290.75	159

151_Rv3616_	152_Rv3628_	153_Rv3762c	154_Rv3763_	155_Rv3763_	156_Rv3775_	157_Rv3804c
127	754	1700.5	1422	675.5	1569.5	20699
84	411	620	366	205	657	1078
252	501	1161	552	381	780.5	659.5
591.5	1241	699	403	359	520	243
111	1160	530	645.5	258	905	328
112	2885	1337	782.5	441	1178	380
177	621.5	1611	898.5	743.5	1210.5	464.5
84	432	747	270	203	671	1728.5
1519	13963	2697.5	941	702	2340.5	548.5
592	752	2209.5	820	708	1288	933
703.5	891	2083	597.5	459	820	1653
21321	3340.5	1073	612	426	904	9169
112	343	1049	375	324	717.5	163
20906	3448	2198	863	721	1537	5072.5
88	605	1826	1143.5	798	830.5	13215
113	230.5	437.5	287	216	6139	366
84	184	314	203.5	143	460.5	639
53	328.5	508	297	288.5	563	30126
17737	3707	1102	729	544	1061	16410.5
134.5	9372	1490	818	2022	2254	31717
48	4808	594	464	406	422	7926
105	2843	2425	756.5	638	3843	21506
120	6868	669.5	344.5	433	555.5	7716
75	765	622	350	440	757	21102.5
55	321	531.5	235.5	155	354	127.5
244	1408	758	465	627.5	1080	186
9652	2198	947	502	532.5	858	357
435.5	8016	932	502.5	502.5	1048	31394
268	1221.5	1384.5	537	694.5	1125	28478.5
84	497	1175	809	1001	913	14846.5
33008	5264	627	457.5	354	797	460
70	1719	501	233	368	337	422
79	299	954	357	269.5	564.5	156.5
80	173	564	225.5	382.5	602	5385
68	219	6226	299.5	298	322	108
67	1015	683	244.5	236	387	29135
41744	6029	1592	1332.5	1554	2428	7574
102	2667	2643	397.5	287	1348.5	125
64.5	136	464	132	172	198	50
49	190	526	190	169	277	2967
286.5	962	680.5	506.5	631	702.5	535
70	2500.5	3666	334	310	561	337.5
81	500	572.5	250	333	456	83
2950	918.5	988	474	269	581	1039
220	742.5	1101	525	397.5	930.5	424
495	997.5	2651.5	709	1005	1940	12549
240.5	1762	2000	972.5	3074	3025	2958.5
70	245	495.5	286	192	649	106.5
103	1264	659	443.5	349	532	7659

93	229	762	340.5	298	379	229
3189	639	437.5	254.5	341	367	4828
409	8299	1147.5	532	897	1300	3434
23096	5139	2327	1576	5521.5	5240.5	4920
7480	2082	3982	517	581.5	743	34713
73	571	718	1504	1126.5	677	20917.5
438	265.5	1112	236.5	304.5	376	169
63.5	784	390	162.5	169	438	308.5
62	262	411	196	186	283	145.5
61	135.5	416.5	182.5	657	206	73
112	494.5	1142	628	1742	868	33618.5
59.5	385	765.5	247	185	363	454.5
82	620	4311.5	1294	730	795.5	26070
284	592	1256	482	743	946	37214.5
40	1456.5	1020	259	127	447.5	91
70	340	525.5	364	387	328.5	4536
48520	8205	1448.5	831	1204	1370	666
90	680	758.5	397.5	430	472	211
18348	3535	1484	603	474.5	816	459.5
33330	5495	1283	753	603.5	1011	27914
850	4731	1479.5	1288	861	1493	11797
96	267.5	765	350	435	641	242
108	1129	733	362	353.5	770.5	12309
224.5	250	530	198	179	398	82
104.5	234	767	366.5	387	996.5	338
58	426	1811	343.5	317.5	576	19339
2906	889	798.5	3135	2409	616	6557
76	130	281	164	300	238	394
37272	6961.5	3274.5	1785	2766	3905.5	33077
71	306	363	447.5	451	435	67
60	242	427	209.5	195	350	1869
24536.5	7208	839	552	739	1050	43127
146	5401	523	347	382	440.5	17610
41.5	73	296	170	720	202	118
103	245	483.5	656	878	703	157.5
63.5	189	514.5	245	213	327	168.5
81	531	638	425	256.5	535	314
67	1184	406.5	835.5	815	396	2379
96	1124	742.5	360.5	300.5	627	4497.5
50318	8119	1494.5	993	3937.5	2299.5	23419
44	3218	627.5	135	106	174	110
6256	18820.5	2305	1795	1803	2145	39784
74	701.5	463	247	217	369	198
158	1364.5	1446	1670	820	2017	590
75	790	594	528	299	576.5	769.5
123	654	941	411	616	759	10390.5
925	1356	2445.5	1231.5	2567	2688	36027
72	7942.5	602	289	430.5	582	2822.5
28559	5403	1101	648	478	924	22382
81	455	567	343	335	555	2528.5



75	192.5	378	217	177	271	103
154	590	1158	440	726	1118	230
116	267	484	250	609	496	25977
126	8774	1083.5	835	605	1177	26392
565.5	522	829	386.5	692	654	287
46768	7942	4967	6508	4849	2165	31071
20	21	63.5	33	31	51	12
145	4045	665.5	370.5	514.5	731	6261.5
312	1057	2062	966	1506	3165	13228
61	10782	545	431	281	286.5	1141
70	746	408	207	187	290	92
81.5	352.5	299	377	184	683	104
85	1186	579	379	340	534	12508
644	582	420	240	152.5	387	92
58	83	159	100	218	126	39
102.5	652	593	317	345	680	1021.5
55	287	408	220	280	323	98
99	428	722	405	640	1268.5	5859
7426	1408	1130	531	835.5	1197	571.5
98	1946.5	1177	661.5	635	1003	2379
102.5	420	904	370	499	639	4048
428	4293.5	1138	1101.5	765.5	1842	1023
84	340.5	558	309.5	393	512	8252.5
188	12539	1073	837	1826.5	1180	26116
171.5	11093.5	1546	909	1220.5	2228	27522
125	969	1048.5	545	587	877.5	454.5
2285	3205.5	1296.5	538	743	985.5	2411
90.5	3239.5	516	268	312.5	479	36281
919	844	945	238	234	409.5	19270
95	422	664	335	318.5	555	189
64	862	488	243	329	427	12599
90	184	597	137	151	481	71
73	246	503.5	294	682.5	341.5	281.5
81	3001	620	767	599	401.5	14323
71	472	1422.5	661	375	523	223
93	201	446.5	179.5	213	305	91
219	891.5	2339	898.5	1671	2968.5	2635
153.5	283	4861	517	325	1337	1817
31	376	290	68	76	124	35
97.5	380	606	647.5	327.5	1134	136.5
75	445	377.5	194.5	275.5	333.5	1408
224.5	285	2358.5	532	500.5	714.5	1590
166	842.5	1402.5	509	745	1024	498.5
206	744	1052	443	1139	649	513
85.25	280	350	239	133	280	81.5

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112	187	126	722
79	83	2367	175
151	347	3032.5	962.5
94	418.5	1976.5	1874
105	154	1553	114
170	190	338	1217
202	3268	3632	527
89	139	345	420
653	612	100	2942
262	333	8419	1072
2004	15944	635.5	274
148	2169	66	28847.5
71.5	125	29	165
205	31175.5	111	41893.5
97	250	76	352
205	347	56	9715
58	118	37	4578.5
98	432	29	16435.5
177.5	1245	76	12727
1492	2897	2062	18705.5
52.5	131	66	6664.5
153	320	98.5	8024
180	140	81	816
172	304	6344	3891
80	234	417	400.5
262.5	828.5	35116.5	142
157	20169	99	27418
262	13686	485	34898
224	522.5	93	23649
147	632	57	13136
96	484	32.5	10908
54	69	40	967
97	348.5	461	87
67	54386.5	737	300
59	103	23	84
53	226	117	48.5
315	52738	366	1325.5
201	137	31.5	345
128	114	12	116
50	288.5	192	51
140.5	647.5	54	173
107	4522.5	438	14397
110	271	137	125
220.5	215.5	44	1406.5
925	266	4611	126
196	32477.5	99	28098
1752	6744.5	198	17036
94	504.5	29	153
99	192	30	8126

72	1427	148	2083
53	126	35	127
661	394	135	22036
3950	7806	625	41006
124	422	44	13728
95	217	34	337.5
218	161	29	14008
55	114	45	369
74.5	254	144	2628
56.5	55	128	212
222	637	138.5	16971
67	3576	29	241
154	377	367	18233
224	431	358	24802
70	57	28	45.5
70	142	31	109
178	8340	99	27591
120	183.5	41	253
211	455	869	29919
152	1485	67	146
1598.5	12237	7712	576
88	37871	94	288.5
274	597	53	28352
199.5	81	46	70.5
95	108	47.5	99
97	3365	40	12706.5
145	393	20515	1041
83	63	2717	41
838	2233	319	48647.5
49	54	293	82
67	72	31	441.5
127	2714	65	131
200	183	36	17864
29	38	12	33
90.5	107	38	2916.5
62	94	54	446
123	257	76	363
38	88.5	16	120
130	145	62	143.5
618	41444	2620	4775.5
35	62	17	44
329	3645	166	294
87	266	35	779
220	611	599	73
121	172	51.5	14819
163	365.5	55	33918.5
689	2123	231	37087
110.5	659.5	42	27775
122	437.5	103	1233
98	269	40	69.5

69	112	25	85
116	246	35	351
82	491	31	83
177.5	336	81	161
1098.5	1900.5	63	383.5
230	51297.5	109	410
10	13	7	12
152	477.5	76	25424
452	6124	900	12594.5
72	113.5	29	45
60	79	3249	88
51	58	203	113
71.5	1170	142	15604
40	70.5	18	64
34	32	14	62.5
142	975.5	348	666
59.5	62	20.5	93
166	47114	96	7364.5
5721	662.5	42	1333.5
133	410.5	89	7686
363	1264	43	84
1147	313	193.5	1749
128	585	712	4442
179	584	836	24687
312	48612	302	11393
268	431	158	118
100.5	15230	1139	228
78	1715	122	316
81	817.5	41	90
131	148	568	3737
75	132.5	37	182
95	4521	47	165
81	95	56	634
131	181	174.5	173
94.5	128	114	60.5
93	107	18	121
750	4297	361	7988.5
371	142	33	86
16	37	18	25
176	689	25	57
78	85	36	48
83	114	39	233
350	204	55	143.5
141	461.5	53	216
83.75	58	10.75	81

Supplement C) Optimization Results

Pool 1 parts (97.18%) 1:200.0 dilution

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_1
1	1	1	265	1885.5	2891 1307
weighted sum				1885.5	2891 1307
threshold			mean neg	255.5	350 112.75

Pool 2 parts (98.59%) 1:400.0 dilution

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_1
1	0.5	100480		1049	1354.5 733.5
1	0.5	252		2383.5	3728 1565
weighted sum				1716.25	2541.25 1149.25
threshold			mean neg	255.5	350 112.75

Pool 3 parts (100%) 1:600.0 dilution

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_1
1	0.33	129		2348.5	4146.5 1545
1	0.33	258		2448	3275 2085
1	0.33	265		1885.5	2891 1307
weighted sum				2227.33	3437.5 1645.67
threshold			mean neg	255.5	350 112.75
				1	1 1

Pool 4 parts (100%) 1:800.0 dilution

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_1
0	0.25	29		601.5	941 375
1	0.25	128		760	1451.5 456
2	0.25	252		2383.5	3728 1565
1	0.25	258		2448	3275 2085
weighted sum				1993.75	3045.63 1417.75
threshold			mean neg	255.5	350 112.75

Pool 5 parts (100%) 1:1000.0 dilution

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_1
3	0.2	252		2383.5	3728 1565
1	0.2	258		2448	3275 2085
1	0.2	265		1885.5	2891 1307
weighted sum				2296.8	3470 1617.4
threshold			mean neg	255.5	350 112.75

Pool 6 parts (100%) 1:1200.0 dilution

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_1
3	0.17	20		793.5	1100 558.5
1	0.17	129		2348.5	4146.5 1545
1	0.17	205		2207	3716 1271
1	0.17	258		2448	3275 2085
weighted sum				1564	2406.25 1096.08
threshold			mean neg	255.5	350 112.75

Pool 7 parts (100%) 1:1400.0 dilution

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_	
3	0.14	100455		947	1368.5	625
3	0.14	129		2348.5	4146.5	1545
1	0.14	265		1885.5	2891	1307
weighted sum				1681.71	2776.57	1116.71
threshold			mean neg	255.5	350	112.75
Pool 8 parts (100%) 1:1600.0 dilution						

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_	
5	0.12	113		2064	3058.5	926
1	0.12	129		2348.5	4146.5	1545
1	0.12	265		1885.5	2891	1307
1	0.12	268		367	825	228.5
weighted sum				1865.12	2894.38	963.81
threshold			mean neg	255.5	350	112.75
Pool 9 parts (100%) 1:1800.0 dilution						

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_	
5	0.11	252		2383.5	3728	1565
1	0.11	265		1885.5	2891	1307
3	0.11	284		541	613	243
weighted sum				1714	2596.67	1095.67
threshold			mean neg	255.5	350	112.75
Pool 10 parts (100%) 1:2000.0 dilution						

parts	factor	sample	42_Rv0212_ADI 2 ls	43_Rv0212_A	44_Rv0272c_	
3	0.1	100364		3899.5	4902.5	2559.5
1	0.1	129		2348.5	4146.5	1545
1	0.1	205		2207	3716	1271
5	0.1	258		2448	3275	2085
weighted sum				2849.4	3894.5	2091.95
threshold			mean neg	255.5	350	112.75
				1	1	1

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
1532	913	1354	1516	952	955	21575
1532	913	1354	1516	952	955	21575
231.75	57	103.5	136.75	71	130	307

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
2157	296	594	990.5	1928	1425	3431
2569	528	1758	1974	3188	2983	893
2363	412	1176	1482.25	2558	2204	2162
231.75	57	103.5	136.75	71	130	307

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
2863	280	1431	1816	761	844	962
12283	117	759.5	1234	1077	550.5	363.5
1532	913	1354	1516	952	955	21575
5559.33	436.67	1181.5	1522	930	783.17	7633.5
231.75	57	103.5	136.75	71	130	307
1	1	1	1	1	1	1

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
1202	192	364	287	1382	518.5	9534.5
644	412	330.5	298	265	581.5	3015.5
2569	528	1758	1974	3188	2983	893
12283	117	759.5	1234	1077	550.5	363.5
4516.25	396.25	1151.5	1370	1929.5	1774.5	1291.25
231.75	57	103.5	136.75	71	130	307

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
2569	528	1758	1974	3188	2983	893
12283	117	759.5	1234	1077	550.5	363.5
1532	913	1354	1516	952	955	21575
4304.4	522.8	1477.5	1734.4	2318.6	2090.9	4923.5
231.75	57	103.5	136.75	71	130	307

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
671.5	121	549	361	764	897	2032
2863	280	1431	1816	761	844	962
1772.5	23637.5	2206	1225	8272	743	18566.5
12283	117	759.5	1234	1077	550.5	363.5
3155.5	4066.25	1007.25	893	2067	804.75	4331.33
231.75	57	103.5	136.75	71	130	307

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
4547	209.5	388	607	9622	4469	3068
2863	280	1431	1816	761	844	962
1532	913	1354	1516	952	955	21575
3394.57	340.21	973	1255	4585.86	2413.43	4809.29
231.75	57	103.5	136.75	71	130	307

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
1197	230	742.5	1917	526.5	1054	1045
2863	280	1431	1816	761	844	962
1532	913	1354	1516	952	955	21575
341.5	89	180	178	448.5	244	260
1340.19	304	834.69	1636.88	599.25	914.12	3502.75
231.75	57	103.5	136.75	71	130	307

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
2569	528	1758	1974	3188	2983	893
1532	913	1354	1516	952	955	21575
502	1168	305	300	467	838	762
1764.78	784.11	1228.78	1365.11	2032.56	2042.67	3147.33
231.75	57	103.5	136.75	71	130	307

45_Rv0272_A	46_Rv0302_A	47_Rv0379_A	48_Rv0394_A	49_Rv0440_A	50_Rv0456c_	51_Rv0583c_
33077	534	1754	593	445	3350	2685
2863	280	1431	1816	761	844	962
1772.5	23637.5	2206	1225	8272	743	18566.5
12283	117	759.5	1234	1077	550.5	363.5
16528.15	2610.45	1269.65	1099	1575.3	1438.95	2940.1
231.75	57	103.5	136.75	71	130	307
1	1	1	1	1	1	1



52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
1247	1292	2163	16365	3811.5	1616	2063.5
1247	1292	2163	16365	3811.5	1616	2063.5
358.25	255	221.5	114.5	572.5	269.5	164

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
792.5	1241	2365	904.5	3095.5	1523	2037
30219	2433	2271	1478	12805	5424	2738.5
15505.75	1837	2318	1191.25	7950.25	3473.5	2387.75
358.25	255	221.5	114.5	572.5	269.5	164

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
23926	2158	1140.5	768	3120.5	1375	1807
1044	2517.5	1145.5	1176	2043	2812	7748
1247	1292	2163	16365	3811.5	1616	2063.5
8739	1989.17	1483	6103	2991.67	1934.33	3872.83
358.25	255	221.5	114.5	572.5	269.5	164
1	1	1	1	1	1	1

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
929	947.5	971	290.5	3335	579	824
517	1264	838	22566	1527	789.5	635
30219	2433	2271	1478	12805	5424	2738.5
1044	2517.5	1145.5	1176	2043	2812	7748
15499.75	2161.88	1631.38	6674.5	7295	3612.38	3465
358.25	255	221.5	114.5	572.5	269.5	164

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
30219	2433	2271	1478	12805	5424	2738.5
1044	2517.5	1145.5	1176	2043	2812	7748
1247	1292	2163	16365	3811.5	1616	2063.5
18589.6	2221.7	2024.3	4395	8853.9	4140	3605.4
358.25	255	221.5	114.5	572.5	269.5	164

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
544.5	1205.5	684.5	5390	2416.5	899	496
23926	2158	1140.5	768	3120.5	1375	1807
1392	3169.5	1833	28789	4342.5	1897	1258
1044	2517.5	1145.5	1176	2043	2812	7748
4665.92	1910.25	1028.75	7817.17	2792.58	1463.5	2050.17
358.25	255	221.5	114.5	572.5	269.5	164

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
511	1289.5	837.5	489	2270	1466	3770
23926	2158	1140.5	768	3120.5	1375	1807
1247	1292	2163	16365	3811.5	1616	2063.5
10651.14	1662.07	1156.71	2876.57	2854.71	1448.43	2684.93
358.25	255	221.5	114.5	572.5	269.5	164

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
2536	1747.5	929	865	3119	1332	1289.5
23926	2158	1140.5	768	3120.5	1375	1807
1247	1292	2163	16365	3811.5	1616	2063.5
15065	4483	409.5	22600.5	1084	432	269.5
6614.75	2083.81	1044.75	5507.31	2951.38	1260.38	1323.44
358.25	255	221.5	114.5	572.5	269.5	164

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
30219	2433	2271	1478	12805	5424	2738.5
1247	1292	2163	16365	3811.5	1616	2063.5
2351	1295.5	508	291	1492	736	1207
17710.56	1927.06	1671.33	2736.44	8034.72	3438.22	2153
358.25	255	221.5	114.5	572.5	269.5	164

52_Rv0632c_	53_Rv0798c_	54_Rv0801_A	55_Rv0934_A	56_Rv0944_A	57_Rv0984_A	58_Rv1030_A
1008	809	703.5	986	1775	1782	1044
23926	2158	1140.5	768	3120.5	1375	1807
1392	3169.5	1833	28789	4342.5	1897	1258
1044	2517.5	1145.5	1176	2043	2812	7748
3356.2	2034.2	1081.15	3839.5	2300.3	2267.8	4493.7
358.25	255	221.5	114.5	572.5	269.5	164
1	1	1	1	1	1	1

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
7582	1709	2010	1884	1831	103	2306.5
7582	1709	2010	1884	1831	103	2306.5
846	153	210	306.75	337	24.75	218.25

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
6247	913	882	1106.5	979	105.5	1797.5
6445	8793	2472.5	2605	4487.5	126.5	2646
6346	4853	1677.25	1855.75	2733.25	116	2221.75
846	153	210	306.75	337	24.75	218.25

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
5870	11648	2073	1956	6608.5	7465	2850.5
21344	1718	2364.5	2905.5	878	41	1353.5
7582	1709	2010	1884	1831	103	2306.5
11598.67	5025	2149.17	2248.5	3105.83	2536.33	2170.17
846	153	210	306.75	337	24.75	218.25
1	1	1	1	1	1	1

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
3404	611	607	658	442	69	426
1368	468.5	640	643.5	4824	377	593
6445	8793	2472.5	2605	4487.5	126.5	2646
21344	1718	2364.5	2905.5	878	41	1353.5
8900.5	4943.13	1987.38	2189.75	3669.25	167.75	1809.63
846	153	210	306.75	337	24.75	218.25

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
6445	8793	2472.5	2605	4487.5	126.5	2646
21344	1718	2364.5	2905.5	878	41	1353.5
7582	1709	2010	1884	1831	103	2306.5
9652.2	5961.2	2358.4	2520.9	3234.3	104.7	2319.6
846	153	210	306.75	337	24.75	218.25

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
3212	492	689	805	1389.5	51	8694
5870	11648	2073	1956	6608.5	7465	2850.5
4668	6929	1686	1741	2383	132	1748
21344	1718	2364.5	2905.5	878	41	1353.5
6919.67	3628.5	1365.08	1502.92	2339.67	1298.5	5339
846	153	210	306.75	337	24.75	218.25

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
10029	775	872	1101	639	55	507
5870	11648	2073	1956	6608.5	7465	2850.5
7582	1709	2010	1884	1831	103	2306.5
7897	5568.29	1549.29	1579.29	3367.64	3237.57	1768.43
846	153	210	306.75	337	24.75	218.25

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
5880.5	3639.5	1249.5	1391	1407.5	78	2377.5
5870	11648	2073	1956	6608.5	7465	2850.5
7582	1709	2010	1884	1831	103	2306.5
841	299	865	896	339	37.5	184
5461.94	3981.69	1399.44	1461.38	1977	999.44	2153.56
846	153	210	306.75	337	24.75	218.25

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
6445	8793	2472.5	2605	4487.5	126.5	2646
7582	1709	2010	1884	1831	103	2306.5
4706	404	481	492.5	18671	54	390
5991.67	5209.56	1757.28	1820.72	8920.17	99.72	1856.28
846	153	210	306.75	337	24.75	218.25

59_Rv1175c_	60_Rv1196_A	61_Rv1242_A	62_Rv1242_A	63_Rv1284_A	64_Rv1411c_	65_Rv1566c_
3922	557	610	691.5	2196	113	1758
5870	11648	2073	1956	6608.5	7465	2850.5
4668	6929	1686	1741	2383	132	1748
21344	1718	2364.5	2905.5	878	41	1353.5
12902.4	2883.8	1741.15	2029.9	1996.95	814.1	1664
846	153	210	306.75	337	24.75	218.25
1	1	1	1	1	1	1

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
2628.5	2908	4033	3876	1948	33745	2313
2628.5	2908	4033	3876	1948	33745	2313
233	248.25	70	130.5	37.5	130.5	195

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
1701.5	4068.5	1182	618.5	307	782	1109
4184	2239	10540.5	3998	1743.5	33307	3056
2942.75	3153.75	5861.25	2308.25	1025.25	17044.5	2082.5
233	248.25	70	130.5	37.5	130.5	195

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
634	1240	648	840	888	235	1272
1260	1815.5	1278	954	347	102	2435
2628.5	2908	4033	3876	1948	33745	2313
1507.5	1987.83	1986.33	1890	1061	11360.67	2006.67
233	248.25	70	130.5	37.5	130.5	195
1	1	1	1	1	1	1

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
866	1037	7661	650.5	511	698	673
390.5	467.5	10551	335	141	211	569
4184	2239	10540.5	3998	1743.5	33307	3056
1260	1815.5	1278	954	347	102	2435
2504.63	1690.25	8227.5	2321.25	993.75	16731.75	2279
233	248.25	70	130.5	37.5	130.5	195

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
4184	2239	10540.5	3998	1743.5	33307	3056
1260	1815.5	1278	954	347	102	2435
2628.5	2908	4033	3876	1948	33745	2313
3288.1	2288.1	7386.5	3364.8	1505.1	26753.6	2783.2
233	248.25	70	130.5	37.5	130.5	195

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
1267	16795.5	6704	1679.5	3173.5	1199	1442
634	1240	648	840	888	235	1272
935	1127	546.5	1024.5	609	1104	1463
1260	1815.5	1278	954	347	102	2435
1105	9094.83	3764.08	1309.5	1894.08	839.67	1582.67
233	248.25	70	130.5	37.5	130.5	195

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
869	1076	3878	568	143	482	912
634	1240	648	840	888	235	1272
2628.5	2908	4033	3876	1948	33745	2313
1019.64	1408	2515.86	1157.14	720.14	5128	1266.43
233	248.25	70	130.5	37.5	130.5	195

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
2660	1080	2333	793.5	644	170.5	1087.5
634	1240	648	840	888	235	1272
2628.5	2908	4033	3876	1948	33745	2313
222	288	157	209	84	280	329.5
2098.06	1229.5	2062.88	1111.56	767.5	4389.06	1169
233	248.25	70	130.5	37.5	130.5	195

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
4184	2239	10540.5	3998	1743.5	33307	3056
2628.5	2908	4033	3876	1948	33745	2313
905	447	389	292	132	2597	513
2918.17	1716	6433.61	2749.11	1229.06	23119	2125.78
233	248.25	70	130.5	37.5	130.5	195

66_Rv1629_A	67_Rv1837c_	68_Rv1860_A	69_Rv1886c_	70_Rv1926c_	71_Rv1980c_	72_Rv1984_A
1048	1148.5	755	543	254.5	5348.5	765.5
634	1240	648	840	888	235	1272
935	1127	546.5	1024.5	609	1104	1463
1260	1815.5	1278	954	347	102	2435
1101.3	1489	984.95	826.35	399.55	1789.45	1720.65
233	248.25	70	130.5	37.5	130.5	195
1	1	1	1	1	1	1

73\_Rv1984c\_ / 74\_Rv2031c\_ / 75\_Rv2094c\_ / 76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ / 79\_Rv2282\_A  
6823 892 1033.5 572 1976 1673.5 3143.5  
6823 892 1033.5 572 1976 1673.5 3143.5  
308.5 40.5 286.25 36.25 295.5 143 337.75

73\_Rv1984c\_ / 74\_Rv2031c\_ / 75\_Rv2094c\_ / 76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ / 79\_Rv2282\_A  
1209.5 106 1774.5 6005 2427 1396 1292.5  
6366.5 364 778 911 2172 1946.5 3868  
3788 235 1276.25 3458 2299.5 1671.25 2580.25  
308.5 40.5 286.25 36.25 295.5 143 337.75

73\_Rv1984c\_ / 74\_Rv2031c\_ / 75\_Rv2094c\_ / 76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ / 79\_Rv2282\_A  
844 1084 496 560 1540.5 987.5 2848  
4430 42 9585 150 3105.5 1762 2510  
6823 892 1033.5 572 1976 1673.5 3143.5  
4032.33 672.67 3704.83 427.33 2207.33 1474.33 2833.83  
308.5 40.5 286.25 36.25 295.5 143 337.75  
1 1 1 1 1 1 1

73\_Rv1984c\_ / 74\_Rv2031c\_ / 75\_Rv2094c\_ / 76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ / 79\_Rv2282\_A  
875 73 1160 155 690 376 857.5  
505 1268 531 466 743 928 633  
6366.5 364 778 911 2172 1946.5 3868  
4430 42 9585 150 3105.5 1762 2510  
4417 509.5 2918 609.5 2048.13 1645.75 2719.75  
308.5 40.5 286.25 36.25 295.5 143 337.75

73\_Rv1984c\_ / 74\_Rv2031c\_ / 75\_Rv2094c\_ / 76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ / 79\_Rv2282\_A  
6366.5 364 778 911 2172 1946.5 3868  
4430 42 9585 150 3105.5 1762 2510  
6823 892 1033.5 572 1976 1673.5 3143.5  
6070.5 405.2 2590.5 691 2319.5 1855 3451.5  
308.5 40.5 286.25 36.25 295.5 143 337.75

73\_Rv1984c\_ / 74\_Rv2031c\_ / 75\_Rv2094c\_ / 76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ / 79\_Rv2282\_A  
1457 2359.5 846 204 1012 781 1139  
844 1084 496 560 1540.5 987.5 2848  
967 236 661 577 1852 958 2038  
4430 42 9585 150 3105.5 1762 2510  
1768.67 1406.75 2213.33 316.5 1589 1008.42 1802.17  
308.5 40.5 286.25 36.25 295.5 143 337.75

73\_Rv1984c\_ /74\_Rv2031c\_ /75\_Rv2094c\_ /76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ /79\_Rv2282\_A  
1058 300 12938 607.5 1574 897.5 2179.5  
844 1084 496 560 1540.5 987.5 2848  
6823 892 1033.5 572 1976 1673.5 3143.5  
1789.86 720.57 5905.07 582.07 1617.07 1046.93 2603.71  
308.5 40.5 286.25 36.25 295.5 143 337.75

73\_Rv1984c\_ /74\_Rv2031c\_ /75\_Rv2094c\_ /76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ /79\_Rv2282\_A  
1284 159 1504 343.5 1426 1275 1905  
844 1084 496 560 1540.5 987.5 2848  
6823 892 1033.5 572 1976 1673.5 3143.5  
311 2226 360 235 441 441 450.5  
1799.75 624.62 1176.19 385.56 1385.94 1184.62 1995.88  
308.5 40.5 286.25 36.25 295.5 143 337.75

73\_Rv1984c\_ /74\_Rv2031c\_ /75\_Rv2094c\_ /76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ /79\_Rv2282\_A  
6366.5 364 778 911 2172 1946.5 3868  
6823 892 1033.5 572 1976 1673.5 3143.5  
516.5 187.5 1884 123 650.5 305.5 729  
4467.22 363.83 1175.06 610.67 1643.06 1369.17 2741.17  
308.5 40.5 286.25 36.25 295.5 143 337.75

73\_Rv1984c\_ /74\_Rv2031c\_ /75\_Rv2094c\_ /76\_Rv2151\_A 77\_Rv2252 lo 78\_Rv2282c\_ /79\_Rv2282\_A  
805.5 112 467 191 886.5 425 1813  
844 1084 496 560 1540.5 987.5 2848  
967 236 661 577 1852 958 2038  
4430 42 9585 150 3105.5 1762 2510  
2637.75 186.6 5048.3 246 2157.95 1203.05 2287.5  
308.5 40.5 286.25 36.25 295.5 143 337.75  
1 1 1 1 1 1 1



80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
873	570.5	1648	1183.5	629	1444	13771
873	570.5	1648	1183.5	629	1444	13771
175.75	40.25	280.5	214.5	42	165	787

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
1096	310.5	1233	1764.5	548	1201	8868.5
1178.5	391	2661.5	1661.5	4992	4288	10404
1137.25	350.75	1947.25	1713	2770	2744.5	9636.25
175.75	40.25	280.5	214.5	42	165	787

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
775	297.5	1456.5	1201.5	524	8595	7145
2235.5	1151	3120	2621.5	451	14944.5	5548
873	570.5	1648	1183.5	629	1444	13771
1294.5	673	2074.83	1668.83	534.67	8327.83	8821.33
175.75	40.25	280.5	214.5	42	165	787
1	1	1	1	1	1	1

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
483.5	135	761	557.5	2377	578	3300
321	463	815	601	9771.5	5647.5	4917
1178.5	391	2661.5	1661.5	4992	4288	10404
2235.5	1151	3120	2621.5	451	14944.5	5548
1228.38	599	2314.5	1636.38	5051.63	7292	7818.25
175.75	40.25	280.5	214.5	42	165	787

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
1178.5	391	2661.5	1661.5	4992	4288	10404
2235.5	1151	3120	2621.5	451	14944.5	5548
873	570.5	1648	1183.5	629	1444	13771
1328.8	578.9	2550.5	1757.9	3211.2	5850.5	10106.2
175.75	40.25	280.5	214.5	42	165	787

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
529.5	109	1186	796	13140	591	2886
775	297.5	1456.5	1201.5	524	8595	7145
837	615.5	1893	1341	11572	3773	8194
2235.5	1151	3120	2621.5	451	14944.5	5548
906	398.5	1671.25	1258.67	8661.17	4847.58	4924.17
175.75	40.25	280.5	214.5	42	165	787

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
1003.5	858	1010	941	348	2635.5	4583
775	297.5	1456.5	1201.5	524	8595	7145
873	570.5	1648	1183.5	629	1444	13771
886.93	576.71	1292.5	1087.29	463.57	5019.36	6993.57
175.75	40.25	280.5	214.5	42	165	787

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
1244	1948.5	1611	1598.5	31763	19639	4683.5
775	297.5	1456.5	1201.5	524	8595	7145
873	570.5	1648	1183.5	629	1444	13771
208	66	402.5	245	200	167	894.5
1009.5	1334.56	1445.25	1327.81	20021	13550.12	5653.5
175.75	40.25	280.5	214.5	42	165	787

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
1178.5	391	2661.5	1661.5	4992	4288	10404
873	570.5	1648	1183.5	629	1444	13771
415	88	527	548.5	86	646	2612.5
890.06	309.94	1837.39	1237.39	2871.89	2758	8180.94
175.75	40.25	280.5	214.5	42	165	787

80_Rv2544_A	81_Rv2618_A	82_Rv2870_A	83_Rv2870_A	84_Rv2873_A	85_Rv2875_A	86_Rv2927_A
1139.5	155	799.5	1599	260	622	3754.5
775	297.5	1456.5	1201.5	524	8595	7145
837	615.5	1893	1341	11572	3773	8194
2235.5	1151	3120	2621.5	451	14944.5	5548
1620.8	713.3	2134.8	2044.7	1513.1	8895.65	5434.25
175.75	40.25	280.5	214.5	42	165	787
1	1	1	1	1	1	1

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
2800	1550	5265.5	2837	1807	3467	2061
2800	1550	5265.5	2837	1807	3467	2061
353.75	113	322.5	514.75	257	521.75	275.75

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
1323	721.5	1115	2097	1156	1647	1231.5
3733.5	1684.5	5509	3820	2614	3254	2392
2528.25	1203	3312	2958.5	1885	2450.5	1811.75
353.75	113	322.5	514.75	257	521.75	275.75

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
2895.5	1603	8391	2764	1621.5	4370	1968
2675	1185	2102	2726	2695	2844	2344
2800	1550	5265.5	2837	1807	3467	2061
2790.17	1446	5252.83	2775.67	2041.17	3560.33	2124.33
353.75	113	322.5	514.75	257	521.75	275.75
1	1	1	1	1	1	1

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
891	355	764.5	1312.5	670	4139	687
820	368	1179	1077	600	1349.5	934
3733.5	1684.5	5509	3820	2614	3254	2392
2675	1185	2102	2726	2695	2844	2344
2740.5	1230.5	3574.75	2860.75	2130.75	2675.37	2015.5
353.75	113	322.5	514.75	257	521.75	275.75

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
3733.5	1684.5	5509	3820	2614	3254	2392
2675	1185	2102	2726	2695	2844	2344
2800	1550	5265.5	2837	1807	3467	2061
3335.1	1557.7	4778.9	3404.6	2468.8	3214.6	2316.2
353.75	113	322.5	514.75	257	521.75	275.75

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
1403	428	1285	1626	987	1750.5	988.5
2895.5	1603	8391	2764	1621.5	4370	1968
2440	1153	4326.5	2939	1864	6013	2647
2675	1185	2102	2726	2695	2844	2344
2036.58	870.83	3112.42	2217.83	1523.58	3079.75	1654.08
353.75	113	322.5	514.75	257	521.75	275.75

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
1095	442.5	1015.5	1483	901.5	1583	979.5
2895.5	1603	8391	2764	1621.5	4370	1968
2800	1550	5265.5	2837	1807	3467	2061
2110.21	1098.07	4783.57	2225.43	1339.43	3046.57	1557.64
353.75	113	322.5	514.75	257	521.75	275.75

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
2258	1370.5	6016	2557	1514	3733	2487
2895.5	1603	8391	2764	1621.5	4370	1968
2800	1550	5265.5	2837	1807	3467	2061
483	224	2086.5	592	360	644	413
2183.56	1278.69	5727.88	2372.25	1419.81	3393.25	2109.62
353.75	113	322.5	514.75	257	521.75	275.75

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
3733.5	1684.5	5509	3820	2614	3254	2392
2800	1550	5265.5	2837	1807	3467	2061
601	177	699.5	1025	500	849	573
2585.61	1167.06	3878.78	2779.11	1819.67	2476	1748.89
353.75	113	322.5	514.75	257	521.75	275.75

87_Rv2984_A	88_Rv2984_A	89_Rv3050_A	90_Rv3243_A	91_Rv3243_A	92_Rv3248_A	93_Rv3319_A
1134.5	382	3070	1529.5	825.5	3397	988.5
2895.5	1603	8391	2764	1621.5	4370	1968
2440	1153	4326.5	2939	1864	6013	2647
2675	1185	2102	2726	2695	2844	2344
2211.4	982.7	3243.75	2392.15	1943.7	3479.4	1930.05
353.75	113	322.5	514.75	257	521.75	275.75
1	1	1	1	1	1	1

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
1084.5	3610	3818	2148.5	1478	1848	1763
1084.5	3610	3818	2148.5	1478	1848	1763
133	392.25	447.5	287.5	343	202	290.75

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
1017	1610	1435	1058	9582	1090.5	1016
1591	4145	4213	3082	2017	2362.5	2666
1304	2877.5	2824	2070	5799.5	1726.5	1841
133	392.25	447.5	287.5	343	202	290.75

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
1249.5	5069	4317	2404.5	2015	1754	1773
1410	3162	2489.5	2202.5	4211.5	2612	2571.5
1084.5	3610	3818	2148.5	1478	1848	1763
1248	3947	3541.5	2251.83	2568.17	2071.33	2035.83
133	392.25	447.5	287.5	343	202	290.75
1	1	1	1	1	1	1

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
475	1110	1023	644	1906	585	703
321	906.5	782	590	762	455	597.5
1591	4145	4213	3082	2017	2362.5	2666
1410	3162	2489.5	2202.5	4211.5	2612	2571.5
1228.25	3089.63	2924.38	2239.13	2251.88	1948	2125.25
133	392.25	447.5	287.5	343	202	290.75

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
1591	4145	4213	3082	2017	2362.5	2666
1410	3162	2489.5	2202.5	4211.5	2612	2571.5
1084.5	3610	3818	2148.5	1478	1848	1763
1453.5	3841.4	3789.3	2719.4	2348.1	2309.5	2466.5
133	392.25	447.5	287.5	343	202	290.75

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
554	1582.5	1302.5	899	1676	599	1113
1249.5	5069	4317	2404.5	2015	1754	1773
1088.5	3796	3014	2104	2000	1682	2082
1410	3162	2489.5	2202.5	4211.5	2612	2571.5
901.67	2795.75	2288	1568	2209.08	1307.5	1627.58
133	392.25	447.5	287.5	343	202	290.75

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
461	1240	1200	913	1975	879	842
1249.5	5069	4317	2404.5	2015	1754	1773
1084.5	3610	3818	2148.5	1478	1848	1763
888	3219.57	2909.86	1728.71	1921.14	1392.43	1372.57
133	392.25	447.5	287.5	343	202	290.75

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
1612.5	3812	3793	1735	2397	1317	1489
1249.5	5069	4317	2404.5	2015	1754	1773
1084.5	3610	3818	2148.5	1478	1848	1763
274	556	506	314	499.5	283	364.5
1333.81	3536.88	3450.75	1692.75	1997.19	1308.75	1418.19
133	392.25	447.5	287.5	343	202	290.75

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
1591	4145	4213	3082	2017	2362.5	2666
1084.5	3610	3818	2148.5	1478	1848	1763
245	782	812	616	6827	348	537.5
1086.06	2964.56	3035.44	2156.28	3560.44	1633.83	1856.17
133	392.25	447.5	287.5	343	202	290.75

94_Rv3319_A	95_Rv3326_A	96_Rv3326_A	97_Rv3362_A	98_Rv3362c_	99_Rv3376_A	100_Rv3376_
510	1123	1067	682	1300	563	661
1249.5	5069	4317	2404.5	2015	1754	1773
1088.5	3796	3014	2104	2000	1682	2082
1410	3162	2489.5	2202.5	4211.5	2612	2571.5
1091.8	2804.4	2297.95	1756.7	2897.25	1818.5	1869.55
133	392.25	447.5	287.5	343	202	290.75
1	1	1	1	1	1	1

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
840.5	925	1356	2445.5	1231.5	2567	2688
840.5	925	1356	2445.5	1231.5	2567	2688
159	85.25	280	350	239	133	280

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
1489.5	592	752	2209.5	820	708	1288
1099	6256	18820.5	2305	1795	1803	2145
1294.25	3424	9786.25	2257.25	1307.5	1255.5	1716.5
159	85.25	280	350	239	133	280

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
1801.5	23096	5139	2327	1576	5521.5	5240.5
11284	158	1364.5	1446	1670	820	2017
840.5	925	1356	2445.5	1231.5	2567	2688
4642	8059.67	2619.83	2072.83	1492.5	2969.5	3315.17
159	85.25	280	350	239	133	280
1	1	1	1	1	1	1

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
397.5	435.5	8016	932	502.5	502.5	1048
339.5	409	8299	1147.5	532	897	1300
1099	6256	18820.5	2305	1795	1803	2145
11284	158	1364.5	1446	1670	820	2017
3455.38	3269.75	11826.13	1800.88	1448	1330.75	1901.75
159	85.25	280	350	239	133	280

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
1099	6256	18820.5	2305	1795	1803	2145
11284	158	1364.5	1446	1670	820	2017
840.5	925	1356	2445.5	1231.5	2567	2688
3084.3	3970.2	11836.4	2161.3	1657.3	1759.2	2228
159	85.25	280	350	239	133	280

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
502.5	105	2843	2425	756.5	638	3843
1801.5	23096	5139	2327	1576	5521.5	5240.5
2125	37272	6961.5	3274.5	1785	2766	3905.5
11284	158	1364.5	1446	1670	820	2017
2786.33	10140.17	3665.67	2387.08	1216.75	1836.92	3782
159	85.25	280	350	239	133	280

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
3436	112	2885	1337	782.5	441	1178
1801.5	23096	5139	2327	1576	5521.5	5240.5
840.5	925	1356	2445.5	1231.5	2567	2688
2364.71	10078.43	3632.57	1919.64	1186.71	2922.07	3134.79
159	85.25	280	350	239	133	280

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
914	240.5	1762	2000	972.5	3074	3025
1801.5	23096	5139	2327	1576	5521.5	5240.5
840.5	925	1356	2445.5	1231.5	2567	2688
160.5	72	7942.5	602	289	430.5	582
921.56	3161.94	2905.94	1921.81	994.88	2986.12	2954.44
159	85.25	280	350	239	133	280

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
1099	6256	18820.5	2305	1795	1803	2145
840.5	925	1356	2445.5	1231.5	2567	2688
426	565.5	522	829	386.5	692	654
845.94	3766.83	10780.5	1828.61	1262.89	1517.56	1708.33
159	85.25	280	350	239	133	280

150_Rv3495c_151_Rv3616_152_Rv3628_153_Rv3762c_154_Rv3763_155_Rv3763_156_Rv3775_						
3522	252	501	1161	552	381	780.5
1801.5	23096	5139	2327	1576	5521.5	5240.5
2125	37272	6961.5	3274.5	1785	2766	3905.5
11284	158	1364.5	1446	1670	820	2017
7091.25	6191.4	2042.6	1631.45	1336.7	1353.05	2157.25
159	85.25	280	350	239	133	280
1	1	1	1	1	1	1



157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
36027 689 2123 231 37087  
36027 689 2123 231 37087  
81.5 83.75 58 10.75 81

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
933 262 333 8419 1072  
39784 329 3645 166 294  
20358.5 295.5 1989 4292.5 683  
81.5 83.75 58 10.75 81

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
4920 3950 7806 625 41006  
590 220 611 599 73  
36027 689 2123 231 37087  
13845.67 1619.67 3513.33 485 26055.33  
81.5 83.75 58 10.75 81  
1 1 1 1 1

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
31394 262 13686 485 34898  
3434 661 394 135 22036  
39784 329 3645 166 294  
590 220 611 599 73  
20898 384.75 2073.75 266.5 5674.25  
81.5 83.75 58 10.75 81

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
39784 329 3645 166 294  
590 220 611 599 73  
36027 689 2123 231 37087  
31193.8 379.2 2733.8 265.6 7608.4  
81.5 83.75 58 10.75 81

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
21506 153 320 98.5 8024  
4920 3950 7806 625 41006  
33077 838 2233 319 48647.5  
590 220 611 599 73  
17184.17 911.17 1935 306.42 18966.42  
81.5 83.75 58 10.75 81

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
380 170 190 338 1217  
4920 3950 7806 625 41006  
36027 689 2123 231 37087  
7418.14 1864.14 3730.14 445.71 23393.71  
81.5 83.75 58 10.75 81

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
2958.5 1752 6744.5 198 17036  
4920 3950 7806 625 41006  
36027 689 2123 231 37087  
2822.5 110.5 659.5 42 27775  
7320.25 1688.69 5538.88 236 23881  
81.5 83.75 58 10.75 81

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
39784 329 3645 166 294  
36027 689 2123 231 37087  
287 1098.5 1900.5 63 383.5  
26200.89 625.5 2894.39 138.89 4411.94  
81.5 83.75 58 10.75 81

157\_Rv3804c\_158\_Rv3864\_159\_Rv3874\_160\_Rv3878\_161\_Rv3881c\_ADI 1  
659.5 151 347 3032.5 962.5  
4920 3950 7806 625 41006  
33077 838 2233 319 48647.5  
590 220 611 599 73  
4292.55 634.1 1413.5 1303.65 9290.6  
81.5 83.75 58 10.75 81  
1 1 1 1 1