

Irs3:1

	9363	9373	9383	9393	
9362:	-----CGCTGTATTGCCTTCGGCTCCGGATGAAGCCC				Mouse_lemur
8988:	CAGCCCCCTTCCTCCAAC . A . T . . . . . GG . A . CA . . . . . G				Bushbaby
9269:	CTGCCTC--TTCTGCAGC . A . T . . . . . C . C . T . A . . . . .				Human
9269:	CTGCCTC--TTCTGCAGC . A . T . . . . . C . C . T . A . . . . .				Chimpanzee
8769:	CTGCCTC--TTCTGCAGC . A . T . . . . . C . T . A . . . . .				Gorilla
9270:	CTGCCTC--TCCTGCAGC . A . T . . . . . C . T . A . . . . .				Orangutan
8798:	CTGCCTC--TCCTGCAGC . A . T . . . . . C . T . A . . . . .				Gibbon
9350:	CTGCCTC--TCCTGCAGT . A . T . . . . . C . T . A . . . . .				Macaque
9325:	CTGCCTC--TCCTGCAGT . A . . . . . C . T . A . . . . .				Olive_Baboon
8792:	CTACCCT--TCCTGTGGCTA . . T . C . . . . . AGC . T . . . . . T				Sq_monkey
9222:	CCACCCT--TCCTGTGGCTA . . --- . . . . . CAGC . T . . . . . G				Marmoset

Irs3:1

	9403	9413	9423	9433	9443	
9394:	GCAGGCGGCAGCCCCACGGAAAGCCAGGGTCCAAGTGCGCCGACGTGTC					Mouse_lemur
9038:	. T . A . . . . . G . . T . . . . TG . . . . . TT . . T . . C .					Bushbaby
9317:	. . . . . G . . . . GG . . G . . GG . AA . G . . . . . C . . . . C .					Human
9317:	. . . . . G . . . . GG . . G . . GG . AA . G . . . . . C . . . . C .					Chimpanzee
8817:	. . . . . G . . . . GG . . G . . GG . AA . G . . . . . C . . . . C .					Gorilla
9318:	A . . . . . G . . . . GG . . G . . GGCAA . G . . . . . T . . . . C .					Orangutan
8846:	. . . . . G . . . . GG . . G . . TGG . AA . G . . . . . AC . . . . C .					Gibbon
9398:	A . GAA . . . . G . . . . GG . . G . . GG . AA . G . . . . . AC . A . . C .					Macaque
9373:	A . GA . . A . . G . . . . GG . . G . . GG . AA . G . . . . . C . A . . C .					Olive_Baboon
8840:	. . . . . TG . . . . GG . . C . . . . G . A . . . . C . A . AG . . G . CT . . C .					Sq_monkey
9267:	. . . . . TG . . . . GG . . CG . . . . G . A . . . . C . A . AG . . C . . . . C .					Marmoset

Irs3:1

	9453	9463	9473	9483	9493	
9444:	CCTCGGCTCTCCGCTGCCCTGGGCCTACCCGGCCGACGTGCGACTCTGCG					Mouse_lemur
9074:	. . . . . C . G . . A . . A . . G . . . . T . T . . . . AA . . C . . A . G . . . CT .					Bushbaby
9360:	. . . . A . . CAG . . . . . G . . T . . . . . GT . . . . .					Human
9360:	. . . . A . . CAG . . . . . G . . T . . . . . G . . . . .					Chimpanzee
8860:	. . . . A . . CAG . . . . . G . . T . . . . A . . AG . . . . .					Gorilla
9361:	. . . . A . . CAG . . . . . G . . T . . . . . G . . . . .					Orangutan
8889:	. . . . A . . CAG . T . . . . . A . . G . . T . . . . . G . . . . .					Gibbon
9441:	. . . . A . . CAG . . . . . G . . T . . A . . . . . C . . . . .					Macaque
9416:	. . . . A . . CAG . . . . . G . . T . . A . . . . . C . . . . .					Olive_Baboon
8890:	. . . . A . . C . G . . . . . G . . T . . . . T . . C . . GT . . . . .					Sq_monkey
9317:	. . . . A . TC . G . . . . . G . . T . . . . . C . . GT . . . . .					Marmoset

Irs3:1

	9503	9513	9523	9533	9543	
9494:	GCCACCTGCGAAAGCAGAAGTCCCAGCGCCGCCGCTTCTTCGCCCTGCGC					Mouse_lemur
9124:	A . . . . . G . . . . A . . . . TA . T . . . . . C . T . . . . A . . . .					Bushbaby
9410:	-----					Human
9410:	-----					Chimpanzee
8910:	-----					Gorilla
9411:	-----					Orangutan
8939:	. . . . . T . . . . .					Gibbon
9491:	-----					Macaque
9466:	-----					Olive_Baboon
8940:	. . . . . T . . . . .					Sq_monkey
9367:	. . . . . T . . . . .					Marmoset

Irs3:1

----->

	9553	9563	9573	9580	
	↓	↓	↓	↓	
9544:	ACCGACCC	CGCGCCT	CGAGTGT	TATGAGAGCGA	-----GA
9174:	. . . A . . .	G . A . . .	A . . . A . . .	A . . . . . . . . .	A . TGGCCCGGCGCAA . .
9421:	G . A . . . .	G . . . . T . C . . . . .	. . . . . CC . . . . .	. . . . .	----- . C
9421:	G . A . . . .	G . . . . T . C . . . . .	. . . . . CC . . . . .	. . . . .	----- . C
8921:	G . A . . . .	G . . . . T . C . . . . .	. . . . . CC . . . . .	. . . . .	----- . C
9422:	G . A . . . .	G . . . . T . C . . . . .	. . . . . CCC . . . . .	. . . . .	-----
8950:	G . A . . . .	G . . . . T . C . . . . .	. . . . . CCA . A . . . . .	. . . . .	----- . C
9502:	G . A . . . .	G . . . . T . C . . . . .	. . . . . C . C . . . . .	. . . . .	-----TC
9477:	G . A . . . .	G . . . . T . C . . . . .	. . . . . C . C . . . . .	. . . . .	-----TC
8951:	. . A . . . .	GG . . . .	T . C . . . .	A . . CC . . . . .	----- . C
9378:	. . A . . . .	AAG . . . .	T . C . . . .	A . . CCT . . . . .	----- . C

Mouse\_lemur  
 Bushbaby  
 Human  
 Chimpanzee  
 Gorilla  
 Oranguatan  
 Gibbon  
 Macaque  
 Olive\_Baboon  
 Sq\_monkey  
 Marmoset

Irs3:1

----->

	9590	9600	9610	9620	9630	
	↓	↓	↓	↓	↓	
9581:	AGCAGTTC	CGCGGTG	GCCCAAG	CGCGGCC	CAGCGCAG	CGTGAGCCTGGTG
9224:	. . T . T . . .	G . . . .	CCA . G . .	AA . A . . . .	T . . . .	CA . . . . A . . C . CA
9458:	. . A . . . .	T . . . .	CGT . . . .	G . . . .	T . . . .	. . . . . C . . . . . C .
9458:	. . A . . . .	T . . . .	CGT . . . .	G . . . .	C . . . .	. . . . . A . . . . . C . . . . . C .
8958:	. . A . . . .	T . . . .	ACGT . . . .	G . . . .	. . . . .	. . . . . G . C . T . . . . . C .
9457:	. . A . . . .	T . . . .	CGT . . . .	G . . . .	. . . . .	. . . . . C . . . . . C . . . . . C .
8987:	. . A . . . .	T . . . .	CG . . . .	G . . . .	A . . . .	----- . C . . . . . C .
9539:	. . A . . . .	T . . . .	G . CG . . . .	GG . A . . . .	. . . . .	T . . . . C . A . . . . . C .
9514:	. . A . . . .	T . . . .	G . CG . . . .	AG . . . .	G . . . .	T . . . . C . A . . . . . C .
8988:	. . A . . C .	A . A . .	TGTT . G . . . .	. . . . .	T . . . .	. . . . . C . . . . . C . . . . . C .
9415:	. . - - - - -	TCA . TGTT .	G . . . . .	. . . . .	T . G . G . . . .	. . . . . C . . . . . C . . . . . C .

Mouse\_lemur  
 Bushbaby  
 Human  
 Chimpanzee  
 Gorilla  
 Oranguatan  
 Gibbon  
 Macaque  
 Olive\_Baboon  
 Sq\_monkey  
 Marmoset

Irs3:1

----->

	9640	9650	9660	9670	9680	
	↓	↓	↓	↓	↓	
9631:	GGCGCGT	GCAACCAT	CAGCAAG	CGCGCGG	ACGCGCC	AGCCACCTGAT
9274:	A . . . .	T . . . .	A . . . .	. . . . .	. . . . .	. . . . . G . . . . .
9508:	. . T . . . . .	. . . . .	C . . . . .	T . . . . .	A . . T . . . . .	. . . . . A . . . . .
9508:	. . T . . . . .	. . . . .	C . . . . .	T . . . . .	A . . . . .	. . . . . A . . . . .
9008:	. . T . . . . .	. . . . .	C . . . . .	T . . . . .	A . . . . .	. . . . . A . . . . .
9506:	. . . . .	. . . . .	C . . . . .	T . . . . .	A . . . . .	. . . . . A . . . . .
9026:	. . . . .	. . . . .	C . . . . .	T . . . . .	A . . . . .	. . . . . A . . . . .
9589:	. . . . .	. . . . .	- - - - -	A . . . . .	A . . . . .	- - . . . . A . . . . .
9564:	. . . . .	. . . . .	. . . . .	A . . . . .	A . . . . .	- - . . . . A . . . . .
9038:	. . . . .	. . . . .	T . C . . . . .	T . . . . .	A . . T . . A . . . . .	. . . . . G . G . . . .
9460:	. . . . .	. . . . .	T . C . . . . .	T . . . . .	A . . T . . A . . . . .	. . . . . G . . . . .

Mouse\_lemur  
 Bushbaby  
 Human  
 Chimpanzee  
 Gorilla  
 Oranguatan  
 Gibbon  
 Macaque  
 Olive\_Baboon  
 Sq\_monkey  
 Marmoset

Irs3:1

----->

	9689	9699	9709	9719	9729	
	↓	↓	↓	↓	↓	
9681:	CGTCCTG-	TACACG	CGCGAC	CAGCAGC	CTGGGCGT	GGCGGCCGCGCCAGCGAA
9301:	. . . . .	CT . . . . .	T . . . . .	. . . . .	G . . . .	A . . . . A . . . . . T . . . . .
9558:	. . . . .	C - . . . .	C . . . . .	. . . . .	C . . . . .	. . . . . AG . . . . G . . . . .
9558:	. . . . .	C - . . . .	C . . . . .	. . . . .	C . . . . .	. . . . . AG . . . . G . . . . .
9058:	. . . . .	C - . . . .	C . . . . .	. . . . .	C . . . . .	. . . . . AG . . . . G . . . . .
9556:	. . C . . . .	C - . . . .	C . . . . .	. . . . .	C . . . . .	. . . . . AG . . . . G . . . . .
9076:	. . . . .	C - . . . .	CT . . . . .	A . . . . .	C . . . . .	T . . . . AG . . . . G . . . . .
9629:	. C . . . .	C - . . . .	C . A . . . .	A . . . . .	C . . . . .	. . . . . AG . . . . G . . . . .
9612:	. C . . . .	C - . . . .	C . A . . . .	A . . . . .	C . . . . .	. . . . . AG . . . . G . . . . .
9088:	. . . . .	- - - - -	. . . . .	C . . . . .	T . . . .	A . . T . . A . . . . . G . . . . .
9510:	. . . . .	C - . . . .	C . . . . .	A . . . . .	T . T . . A . . . . .	A . . . . C . G . . . . .

Mouse\_lemur  
 Bushbaby  
 Human  
 Chimpanzee  
 Gorilla  
 Oranguatan  
 Gibbon  
 Macaque  
 Olive\_Baboon  
 Sq\_monkey  
 Marmoset

Irs3:1

	9739	9749	9759	9769	9779	
	↓	↓	↓	↓	↓	
9730:	GCGGAGCAGCAGGCCGTGGTACTGCGCCCTGCTCGAGGTGCGCGCCGCGGC					<b>Mouse_lemur</b>
9351:	.....TT.T.....AC...A.....A...T...C.T.....CA.					<b>Bushbaby</b>
9607:	.....A...AA.A.....A.....GT.AT..					<b>Human</b>
9607:	.....A...AA.A.....A.....GT.AT..					<b>Chimpanzee</b>
9107:	.....A...AA.A.....A.....GT.AT..					<b>Gorilla</b>
9605:	.....A...AA.....A.....GT..C..					<b>Orangutan</b>
9125:	.....A...AA.....G.A.....GT..C..					<b>Gibbon</b>
9678:	.....A...AA.....C.....GT..C..					<b>Macaque</b>
9661:	.....A...AA.....C.....GT..C..					<b>Olive_Baboon</b>
9134:	.....G.....AA.....CA.TA.G...C..					<b>Sq_monkey</b>
9559:	..-...G.....C.AA..T.....CG..CA.TA.G...C..					<b>Marmoset</b>

Irs3:1

	9789	9799	9809	9816	
	↓	↓	↓	↓	
9780:	TGGTGAGGCCCGAGCCCTGGGCTGCAAGGGG---CTGGGGGGATCGTGG-				<b>Mouse_lemur</b>
9401:	CT.....C.....G.....---TCA...A..C...A.G				<b>Bushbaby</b>
9657:	C.....C.....T.CG.....--C..C.....C.TC...C				<b>Human</b>
9657:	C.....C.....T.CG.....--C..C.....C.TC...C				<b>Chimpanzee</b>
9157:	C.....C.....T.CG.....--C..C.....C.TC...C				<b>Gorilla</b>
9655:	C..C..A.....C.....T.CG.....--C.CC.....C.TC...C				<b>Orangutan</b>
9175:	C.....CA...T.CG.....--C.CC.....C.T...C				<b>Gibbon</b>
9728:	C-----T...CG...A--C.CC.....C.T...C				<b>Macaque</b>
9711:	C-----T...CG...A--C.CT.....C.T...C				<b>Olive_Baboon</b>
9184:	CA.....G.....TG.....C..A.C--CTCC...C.C.T...C				<b>Sq_monkey</b>
9608:	CA.....-..T..C.....CGA...GCC.CC.....C.T...C				<b>Marmoset</b>

	9834	9843	9852	9862	
	↓	↓	↓	↓	
9826:	-GGGGTTTATCTGTAG-----CCCAGGTCA-CGAAAATTCAAAC				<b>Mouse_lemur</b>
9441:	TTT.....TCC...CCTGTCTCTCCT.....CT...G.....				<b>Bushbaby</b>
9705:	T.T....C..C..G.CTCGCCCCCTCC.....GC.....G.....				<b>Human</b>
9705:	T.T....C..C..G.CTCGCCCCCTCC.....GC.....G.....				<b>Chimpanzee</b>
9205:	T.T....C..C..G.CTCGCCCCCTCC.....GC.....G.....				<b>Gorilla</b>
9703:	T.T....C..C..G.CTCGCCCCCTCC.....GC.....G.....				<b>Orangutan</b>
9223:	T.T....C..C..G.CTCGCCCCCTCC.....GC.....G.....				<b>Gibbon</b>
9767:	T.T....C..C..G.CTCGCCCCCTGC.....C.....G.....				<b>Macaque</b>
9749:	T.T....C..C..G.CTCGCCCCCTGC.....C.....G.....				<b>Olive_Baboon</b>
9232:	T.T....C...AG.CTCGCCCCCTCC.....C.....G.....				<b>Sq_monkey</b>
9657:	T.T....T..C..G.ATCGCCCCCTCC.....C.....G.....				<b>Marmoset</b>

	9871	9881	9891	9897	9907	
	↓	↓	↓	↓	↓	
9863:	ATT-AAGTGTTTACCTGTCTTCAGCTCTCT-GG-GCA--GTGATTGTAAC					<b>Mouse_lemur</b>
9491:	...A..-CA..C..AA.....A...G.TA-...CAA...C.C....					<b>Bushbaby</b>
9755:	...A...G.---G.AG..T.AG..T...C-...-..					<b>Human</b>
9755:	...A...G.---G.AG..T.AG..T...C-...-..					<b>Chimpanzee</b>
9255:	...A...G...G.AG..T.AG..T...C...C..G--...GC.					<b>Gorilla</b>
9753:	...A...G...G.AG..T.AG..T...C-C-...-..					<b>Orangutan</b>
9273:	...A...G...G.AG..T.AG..T...C-...-..					<b>Gibbon</b>
9817:	...A...G...G.A...T.AG..T...C-...-..					<b>Macaque</b>
9799:	...A...G...G.A...T.AG..T...C-...-..					<b>Olive_Baboon</b>
9282:	...A...GA...G.AG..T.AG..T....					<b>Sq_monkey</b>
9707:	...A...G...G.AG..T.AG..T...CT...-..					<b>Marmoset</b>

Irs3:2  
→

9917            9927            9937            9947            9957

9908: CTCCCGGGCCAGGAGCGCTTTGTGACCAGCCCATTTGTCTCCCTAGGACCC  
9538: ...T...T...G.TGC.C.C.....A.....AA....C.A.T.A.

**Mouse\_lemur**  
**Bushbaby**

Irs3:2  
→

9967            9977            9987            9997            10007

9958: AGCTCCTACGAGGACCCTGGGACCTGGATCCTCTCTCCGTTCCAGGACGT  
9588: ..T..-----..AC...T...-...A.....  
9580: .....G.....TG..  
10007: .....G.....TG..

**Mouse\_lemur**  
**Bushbaby**  
**Sq\_monkey**  
**Marmoset**

Irs3:2  
→

10017            10027            10037            10047            10057

10008: CTGGCCCGTGACGCTGCGGCCCAAAGGGCTGGGGCGGACCCGAGGCCTGG  
9619: ....T.T.....AT.....T.....A.....T.....  
9607: ....T.C.....GTT.....  
10034: ....T.C.....GTT....C..G.....A.

**Mouse\_lemur**  
**Bushbaby**  
**Sq\_monkey**  
**Marmoset**

Irs3:2  
→

10067            10077            10087            10097            10107

10058: GCAGCGGCGGCTACCGCTTGTGCCTGGGTTTCGGGGGCTCTGAGTCTGCTG  
9669: ....T..T.....TT.CC.....C.....C.....A  
9640: ----T.....C.....T.....  
10084: .---A.....A.C...A.T....-----

**Mouse\_lemur**  
**Bushbaby**  
**Sq\_monkey**  
**Marmoset**

Irs3:2  
→

10117            10127            10137            10147            10157

10108: CGGAAGCCCAGGGGCGAGGGCTTCCGGGATAACCGGGCATTGCCGCCGCC  
9719: T.....CA.A.T..-...G.A...C.C.GA....CA...A...  
9664: -----T.CAC....A..T.C..T....  
10109: -----T.C.....A..T.C..T....

**Mouse\_lemur**  
**Bushbaby**  
**Sq\_monkey**  
**Marmoset**

Irs3:2  
→

10167            10177            10187            10197            10207

10158: CGCCCTGCGCCTGCCCTGCTCAGCGTGCGCCGCTGCGGCCACGCAGACT  
9768: T.....TA..G.....A.G.T...C...T.....  
9688: -...G..A.....T.A...GG....A....AGG...  
10133: -.....A.....T.A...T.....C...G.-

**Mouse\_lemur**  
**Bushbaby**  
**Sq\_monkey**  
**Marmoset**

Irs3:2  
→

10217            10227            10237            10247            10257

10208: CTTTCTTCTTCCTGGAGCTCGGCCGCTCGGCACCCACGGGTCCCGGGGAG  
9818: ..----.....T..T...T..G.TTG..T.T.T..A.T.....  
9737: G.C--.....TT.....G.....  
10181: -----T.....T.....T...A....-G.----A.....

**Mouse\_lemur**  
**Bushbaby**  
**Sq\_monkey**  
**Marmoset**



## Irs3:2

	10491	10501	10511	10521	10531	
	↓	↓	↓	↓	↓	
10482:	GATCAAGCAAGCAACCCTTGGGACCCCGCGAGGCTAGGGGCGGCAGCCT					Mouse_lemur
10049:	...C...A...T..CA..GA...AA...A...A..T.T...T.					Bushbaby
10249:	...G.....G.....AA...TTG.....G...A.A.....					Human
10232:	...G.....G.....AA...TTG.....G...A.A.....					Chimpanzee
9737:	...G.....G.....AA...TTG.....G...A.....					Gorilla
10220:	.....G.....AA...TTG.....G...A.....T.					Oranguatan
9738:	...G.T.....G.....AA...TTG.....G...A.....					Gibbon
10281:	...					Olive_Baboon
10286:	.....G....CAA...TTG..A.....G..T..A.....					Olive_Baboon
10003:	A.C.C.....GT...GAA..T.TTG..A.A...GT.A.G...A...					Sq_monkey
10465:	A.C.C.....T.GT...GAA..T..T-..A.A...G..A.G..T.A...					Marmoset

## Irs3:2

	10541	10551	10561	10571	10581	
	↓	↓	↓	↓	↓	
10532:	TGCACCTCTAAGGCGCTGGATCAGGGGGGAGCTACATAAACATGGGAGCC					Mouse_lemur
10099:	...G.....G.A....-TC..CT...GAG.G.....-----					Bushbaby
10299:	.CT..C.....G.-----T..T..G.....C..A.....A					Human
10282:	.CT..C.....G.-----G..T..G.....C..A.....A					Chimpanzee
9787:	.CT..C.C...G.-----G..T..G.....C..A.....A					Gorilla
10270:	CCT..C.C..T.G.-----G..T..G.....C..A.....G					Oranguatan
9788:	CCT..C.C...G.-----G..AT..G.....C..A.....TG					Gibbon
10331:	CCT..C.C...G.-----T..G.....C..A.....TG					Olive_Baboon
10053:	..T..C.C...G.-----G..T..G.....C..A.....TG					Sq_monkey
10514:	..T..C.CG...G.-----TG..T..G.....C..A.....TG					Marmoset

## Irs3:2

	10591	10601	10611	10621	10631	
	↓	↓	↓	↓	↓	
10582:	GGGAGTGACTACGAGCCCATGGGGGGCGGCAGCGGGCGGCTACACGGT					Mouse_lemur
10144:	-----C.....A.T.....A.A...GTA..					Bushbaby
10343:	.....T.....					Human
10326:	..C.....					Chimpanzee
9831:	.....A.....					Gorilla
10314:	.....					Oranguatan
9832:	.....C.....					Gibbon
10375:	.....					Olive_Baboon
10097:	..T.....A.....CA..					Sq_monkey
10558:	..T.....A.....A..					Marmoset

## Irs3:2

	10641	10651	10669	
	↓	↓	↓	
10632:	GATGGCGTCCCAGGCCTTTGTCCGGCCA-----CTCCTGCTC			Mouse_lemur
10181:	...A..T.....A-.....A....CCTCCAGCGCCG....C....			Bushbaby

## Irs3:2

	10679	10689	10697	
	↓	↓	↓	
10670:	CTGGCCAACCTCTCCAGGAC-----TGGGGGGA			Mouse_lemur
10230:	TCCA...GT.G..T....T-----A-			Bushbaby
10345:	...GTGGGGGCTACATAACCAAGGGAG....A.-			Olive_Baboon

Irs3:2

10707 10716 10726 10736 10746  
 10698: CACCGAATACGTGCCC-ATGAACCGCTTTCCGCCAGGGTCCTTTTCCTTG  
 10257: . . . . A . . . . TA . . . . A . . . . G . TT . . . . C . . T . . . . . . . . . . . . . . . . T . C .  
 10380: ---T . . C . . . . A . . . . - . . . . G-----

Mouse\_lemur  
 Bushbaby  
 Olive\_Baboon

Irs3:2

10756 10766 10776 10786 10796  
 10747: AGCTCGCTGCACCACTCCTACAAGTCCGGAGCTGGGAAGCCTGGACCCGG  
 10307: . . . . C . . . . C . . GT . . . . . . . . . . T . . ----- . . T . .  
 10359: . . . . T . . . . . . . . . . T . . - T . CA . G . . . . . . . . . . A . A .  
 10342: . . . . T . . . . . . . . . . T . . - T . CA . G . . . . . . . . . . A . A .  
 9847: . . . . T . . . . . . . . . . T . . - T . CA . G . . . . . . . . . . A . A .  
 10330: . . . . T . . . . . G . . . . . . . . . . - T . CA . G . . . . . . . . . . A . A .  
 9848: . . . . T . . . . . . . . . . . . . . . . - T . CA . G . . . . . . . . . . A . A .  
 10397: ----- . G . . . . T . . . . . . . . . . T . . - . . CA . G . . . . . . . . . . A .  
 10121: . . T . TC . . . . . . . . . . . . . . . . A - T . . . . G . . TT . . . . . . . . A .  
 10582: . . T . TC . . . . . . . . . . . . . . . . A - T . . . . G . . TT . . . . . . . . A .

Mouse\_lemur  
 Bushbaby  
 Human  
 Chimpanzee  
 Gorilla  
 Oranguatan  
 Gibbon  
 Olive\_Baboon  
 Sq\_monkey  
 Marmoset

Irs3:2

10806  
 10797: GCTCCGGAGC-----  
 10342: . . . . . AG . G-----  
 10397: . . C . A . . . . T-----  
 10380: . . C . A . . . . T-----  
 9885: . . C . A . . . . T-----  
 10368: . . C . A . . . . T-----  
 9886: . . C . A . . . . T-----  
 10438: . . CAA . . . . -----  
 10160: . . C . A . . G . .-----  
 10621: . . C . A . . G . TACCCATCGTGGTGTGGGGGGTGGTTGGGGATGGGCAGGGG

Mouse\_lemur  
 Bushbaby  
 Human  
 Chimpanzee  
 Gorilla  
 Oranguatan  
 Gibbon  
 Olive\_Baboon  
 Sq\_monkey  
 Marmoset

Irs3:2

10815 10825 10835 10845 10855  
 10807: -GCCCATCGCAGCGCTGGGGGCAGCTGGGGACTGCCAAGGGCTCAGCCCT  
 10352: - . . . . . T . . T . . A . . T . . . . . . . . . . CATT . GA . . . . G . . . . T .  
 10407: - . . . . . GAT . TG . . . . CTG . . . . . . . . . . TG . GT . G . . A . . . . . G . .  
 10390: - . . . . . GAT . TG . . . . CTG . . . . . . . . . . TG . GT . G . . A . . . . . G . .  
 9895: - . . . . . AT . TG----- . . . . . TG . GT . G . . A . . . . . G . .  
 10378: - . . . . . ATGAT . TG . . . . CTG . . . . . . . . . . G . GT . G . . A . . . . . G . .  
 9896: - . . . . . GAT . TG . . . . CTG . . . . . . . . . . G . GT . G . . A . . . . . GG . .  
 10448: - . . . . . A . GAT . TG . . . . CTG . . . . . . . . . . G . GT . G . . . . . . . . G . .  
 10170: - . . . . . TGAT . A . . . . TG . . . . . . . . . . G . GTGG . . . . . . . . A . .  
 10671: C . . . . . TG . T . TG . . . . TG . . . . . . . . . . TG . G . . G . . . . . . . . A . .

Mouse\_lemur  
 Bushbaby  
 Human  
 Chimpanzee  
 Gorilla  
 Oranguatan  
 Gibbon  
 Olive\_Baboon  
 Sq\_monkey  
 Marmoset

## Irs3:2

	10864	10874	10884	10893	10903	
10856:	GTTCCC	-TGTCGCCGTCCGAGCTGGCCGGGAAGC-	ACGTGTACACCGAGT			<b>Mouse_lemur</b>
10401:	.....TC	C...G...G...T...GA.....T-.AC..G..TGT...				<b>Bushbaby</b>
10456:	.C...--	.C.C..C..A.....TA..G..TG.A...G...A...				<b>Human</b>
10439:	.C...--	.C.C..C..A.....TA..G..TG.A...G...A...				<b>Chimpanzee</b>
9934:	.C...--	.C.C..C..A.....T..G..TG.A...G...A...				<b>Gorilla</b>
10427:	.C...--	.CAC..C..A.....T..G..TG.A...G...A...				<b>Oranguatan</b>
9945:	.C...--	.C.C..C..A.....T..G..TG.A...G...A...				<b>Gibbon</b>
10497:	.C...--	.G.C..C..G.....T..G..G-.A...G..T.A...				<b>Olive_Baboon</b>
10219:	.C...--	.A..C.GC.T.....T..G..TT.A...G..T.A.A.				<b>Sq_monkey</b>
10721:	.C...--	.C.C..C.TGC.....T..G..TT.A...G..CT.A...				<b>Marmoset</b>

## Irs3:2

	10913	10923	10941	10951	
10904:	ACGCGGCCCCAAACTGCGTAGGAATAGCT--TCTGCCGGGCCAGAGCCCC				<b>Mouse_lemur</b>
10450:	..CA.....GG...AG...GTATTGCCGA.....A..G...GT..				<b>Bushbaby</b>
10504:	TAT.....G.GA..C.C...CC.GC--A.C..A.....				<b>Human</b>
10487:	TAT.C.....G.GA..C.C...C..GC--A.C..A.....				<b>Chimpanzee</b>
9982:	TAT.....G.GA..C.C...C..GC--A.CA..A.....				<b>Gorilla</b>
10475:	TAT.....G.GA..C.CA..C..GC--A.C..A.....T				<b>Oranguatan</b>
9993:	TAT.....GCGA..C.CA..C..GC--A.C..A.T.....				<b>Gibbon</b>
10544:	TAC.....-G.GA..C.CCA..C..TC--A.C..A.....				<b>Olive_Baboon</b>
10267:	TT..A.....GG.GA..C.G...C.TG.--A.CA..A..TG.....				<b>Sq_monkey</b>
10769:	TT..A..T..G.GA..C.G...C.TGC--A.CA..A..TG.....				<b>Marmoset</b>

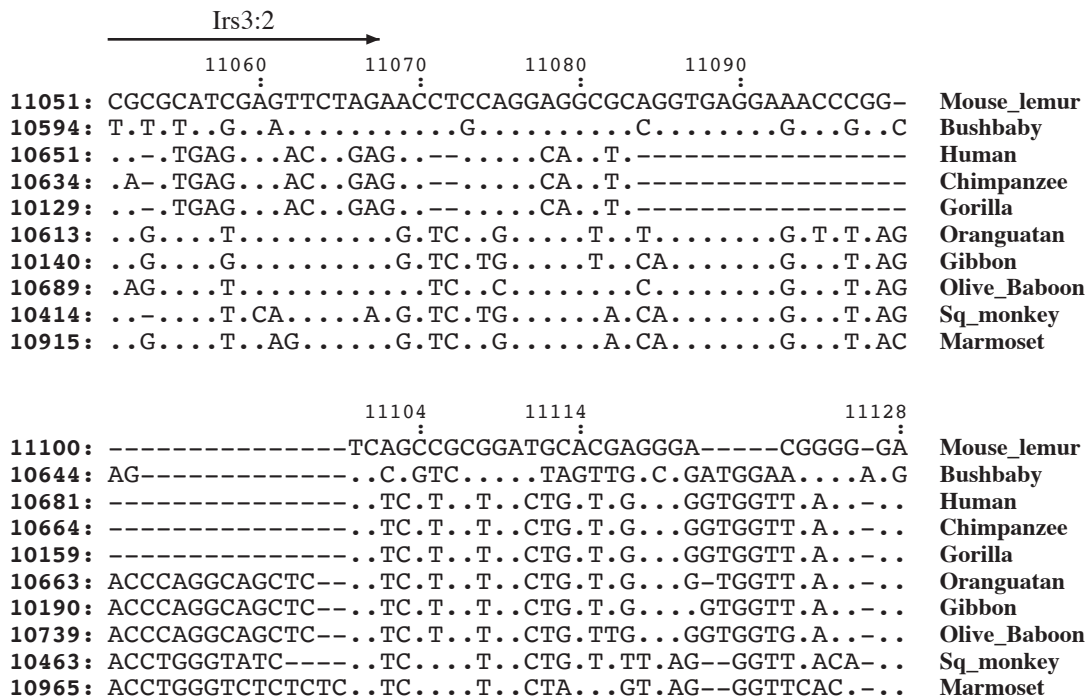
## Irs3:2

	10961	10971	10981	10991	11001	
10952:	CAGACGGCCATCTCAACTACGTTCGACTTGGACCTGGTCCCCTCCTCTGGAG					<b>Mouse_lemur</b>
10500:	.....A..TGC...T.....-----T.....G...T...T...					<b>Bushbaby</b>
10552:	TGACGA..TGC...G.....TC.....T.T...G.					<b>Human</b>
10535:	TGACGA..TGC...G.....TC.....T.T...G.					<b>Chimpanzee</b>
10030:	TGACGA..TGC...G.....TC.....T.T...G.					<b>Gorilla</b>
10518:	GTTCGA..TGC...G.....-C.....T.T...G.					<b>Oranguatan</b>
10041:	TGACAA..TGC...G...T..T..TC.....T.T.T...G.					<b>Gibbon</b>
10590:	TGACGA..TGC...G...T..T..C.....T.T...G.					<b>Olive_Baboon</b>
10315:	TGAC-A..TGC...GT...G...C.....T.T...G.					<b>Sq_monkey</b>
10817:	TGAC-A..TGC...GT...G...C.....T.T...G.					<b>Marmoset</b>

## Irs3:2

	11011	11021	11030	11040	11050	
11002:	GCGCGCGGCGACGTCCCCGGGGTCC-GCAAGCTCCTCCCGCACAGCTACG					<b>Mouse_lemur</b>
10545:	.AA...A..TG...T.....GG-...T.....A..T..T...T					<b>Bushbaby</b>
10602:	..A.TT..T.....A..C.-A..C...G...A..T...T.					<b>Human</b>
10585:	..ATTT..T.....A..C.-...C...G...T...T.					<b>Chimpanzee</b>
10080:	..A.TT..T.....A..C.-...C...G...T...T.					<b>Gorilla</b>
10564:	..A.TT..A.....A..C.-...C...G...T...T.					<b>Oranguatan</b>
10091:	..A.TT..T.....A.....-...C...G...T...T.					<b>Gibbon</b>
10640:	..A.TT..T..T.....A..C.T-...C...G...GT...A					<b>Olive_Baboon</b>
10364:	..A.T.T...A.....C..T.A.CA..TG..T.....A					<b>Sq_monkey</b>
10866:	..A.T.T...A...T...CCC.T-.A.CA..TGT.T.....T					<b>Marmoset</b>





**Figure S7. Alignment of *Irs3* genomic sequences.** An alignment of *Irs3* genomic sequences from diverse primates was generated using MultiPipMaker [56,57]. Dots (.) in the alignment indicate bases identical to those in the top line, while dashes (-) are gaps introduced to maximize similarity. Blank spaces are regions that have no similarity to the mouse lemur (labeled Mouse\_lemur) that was used as the master sequence for the alignment. Annotation of the *Irs3* gene is shown above the alignment, based on alignment of the mouse lemur gene with those from other diverse mammals (results not shown). The arrows above the sequence represent the coding exons and are labeled Irs3:1 and Irs3:2 and starts from the initiator ATG and ends with the TAG termination codon. Sq\_monkey is squirrel monkey.