

Table S1: Individual antibody titres over time after using a prime and boost MVA vaccination regimen against cowpox in two alpaca herds in Germany

ID	Herd	Gr	P	Age in years	Sex	Pre-existing field titre		IFA (MVA)			
						IFA (CPXV)*	IFA (MVA)**	TP2	TP3	TP4	TP5
101	I	1	1	4.25	f	1:500	1:500	1:2,000	1:500	1:200	1:200
103	I	1	1	7.45	f	1:500	1:2,000	1:4,000	1:4,000	1:1,000	1:1,000
118	I	1	1	0.15	m		n.d.	1:200	1:4,000	1:200	1:200
136	I	1	1	5.33	f		1:4000	1:4,000	1:8,000	1:2,000	1:2,000
138	I	1	1	6.57	f	1:500	1:4000	1:1,000	1:2,000	1:500	1:500
139	I	1	1	10.49	f	1:500	>0<1:200	1:500	1:500	1:200	1:200
145	I	1	1	8.50	f	1:200	1:500	1:4,000	1:2,000	1:500	1:1,000
166	I	1	1	1.53	m	1:500	1:2,000	1:4,000	1:8,000	1:2,000	1:1,000
1	II	1	1	2.99	f		<1:200	1:1,000	1:500	1:500	1:500
2	II	1	1	5.01	f		<1:200	1:1,000	1:1,000	1:1,000	1:200
3	II	1	1	3.79	f		<1:200	1:1,000	1:500	1:500	1:200
12	II	1	1	1.84	f	1:500	1:4,000	1:1,000	1:1,000	1:500	1:500
15	II	1	1	3.98	f		<1:200	1:8,000	1:4,000	1:2,000	1:1,000
16	II	1	1	1.86	f	1:500	1:8,000	1:4,000	1:2,000	1:2,000	1:1,000
17	II	1	1	6.31	f		<1:200	1:4,000	1:2,000	1:1,000	1:500
20	II	1	1	4.00	f		<1:200	1:2,000	1:1,000	1:200	1:500
25	II	1	1	2.75	f		<1:200	1:1,000	1:500	1:200	1:200
112	I	2	2	0.11	m		n.d.	1:500	1:500	1:500	>0<1:200
9	II	2	2	2.08	m		<1:200	1:200	1:4,000	1:200	>0<1:200
8	II	2	3	2.00	m		<1:200	<1:200	1:4,000	1:500	1:500
165	I	2	4	1.75	m	1:500	<1:200	1:1000	1:1,000	<1:200	<1:200
105	I	2	4	4.34	f		<1:200	1:200	1:500	<1:200	<1:200
109	I	2	4	0.19	f		n.d.	1:200	1:2,000	<1:200	<1:200
123	I	2	4	4.25	f		<1:200	1:200	1:200	<1:200	<1:200
125	I	2	4	1.74	f		<1:200	1:200	1:1,000	<1:200	<1:200
131	I	2	4	0.31	f		n.d.	1:200	1:2,000	<1:200	<1:200
133	I	2	4	1.24	f		<1:200	1:200	1:500	<1:200	<1:200
135	I	2	4	5.62	f		<1:200	1:500	1:200	<1:200	<1:200
150	I	2	4	1.28	f		<1:200	1:200	1:500	<1:200	<1:200
154	I	2	4	4.23	m		<1:200	1:200	1:500	<1:200	<1:200
158	I	2	4	7.26	m		<1:200	1:200	1:500	<1:200	<1:200
159	I	2	4	2.29	m		<1:200	1:200	1:500	<1:200	<1:200
162	I	2	4	1.56	m		<1:200	1:200	1:200	<1:200	<1:200
120	I	2	5	0.31	f		n.d.	<1:200	1:500	1:200	<1:200
13	II	2	6	0.91	m		<1:200	>0<1:200	1:1,000	>0<1:200	<1:200
21	II	2	6	6.01	f		<1:200	>0<1:200	1:1,000	>0<1:200	<1:200
116	I	2	7	0.13	m		n.d.	<1:200	1:500	>0<1:200	<1:200
27	II	2	7	4.84	f		<1:200	<1:200	1:1,000	>0<1:200	<1:200
128	I	2	8	1.69	f		<1:200	>0<1:200	1:500	<1:200	<1:200
134	I	2	8	2.52	f		<1:200	>0<1:200	1:1000	<1:200	<1:200
147	I	2	8	0.32	m		n.d.	>0<1:200	1:200	<1:200	<1:200
161	I	2	8	1.68	m		<1:200	>0<1:200	1:500	<1:200	<1:200
18	II	2	8	0.88	f		<1:200	>0<1:200	1:200	<1:200	<1:200
102	I	2	9	0.12	m		n.d.	<1:200	1:200	<1:200	<1:200
106	I	2	9	4.42	f		<1:200	<1:200	1:200	<1:200	<1:200
107	I	2	9	0.07	f		n.d.	<1:200	1:500	<1:200	<1:200
111	I	2	9	4.00	f		<1:200	<1:200	1:500	<1:200	<1:200

113	I	2	9	4.25	f		<1:200	<1:200	1:200	<1:200	<1:200
114	I	2	9	0.08	m		n.d.	<1:200	1:1,000	<1:200	<1:200
117	I	2	9	4.25	f		<1:200	<1:200	1:500	<1:200	<1:200
122	I	2	9	1.75	f		<1:200	<1:200	1:500	<1:200	<1:200
124	I	2	9	2.13	f		<1:200	<1:200	1:500	<1:200	<1:200
129	I	2	9	1.85	f		<1:200	<1:200	1:500	<1:200	<1:200
130	I	2	9	4.25	f		<1:200	<1:200	1:500	<1:200	<1:200
132	I	2	9	2.37	f		<1:200	<1:200	1:200	<1:200	<1:200
142	I	2	9	4.42	f		<1:200	<1:200	1:500	<1:200	<1:200
146	I	2	9	4.25	f		<1:200	<1:200	1:500	<1:200	<1:200
148	I	2	9	2.50	f		<1:200	<1:200	1:500	<1:200	<1:200
156	I	2	9	3.36	m		<1:200	<1:200	1:200	<1:200	<1:200
157	I	2	9	2.32	m		<1:200	<1:200	1:200	<1:200	<1:200
160	I	2	9	1.27	m		<1:200	<1:200	1:200	<1:200	<1:200
164	I	2	9	1.64	m		<1:200	<1:200	1:500	<1:200	<1:200
167	I	2	9	1.76	m		<1:200	<1:200	1:500	<1:200	<1:200
7	II	2	9	9.76	m		<1:200	<1:200	1:500	<1:200	<1:200
14	II	2	9	4.77	f		<1:200	<1:200	1:500	<1:200	<1:200
19	II	2	9	0.94	f		<1:200	<1:200	1:200	<1:200	<1:200
22	II	2	9	15.45	f		<1:200	<1:200	1:500	<1:200	<1:200
108	I	2	10	4.25	f		<1:200	1:200	<1:200	<1:200	<1:200
149	I	3	11	4.34	f		<1:200	>0<1:200	>0<1:200	<1:200	<1:200
104	I	3	12	0.07	f		n.d.	<1:200	>0<1:200	<1:200	<1:200
115	I	3	12	5.08	f		<1:200	<1:200	>0<1:200	<1:200	<1:200
121	I	3	12	3.35	f		<1:200	<1:200	>0<1:200	<1:200	<1:200
140	I	3	12	4.34	f		<1:200	<1:200	>0<1:200	<1:200	<1:200
153	I	3	12	7.37	m		<1:200	<1:200	>0<1:200	<1:200	<1:200
24	II	3	12	11.45	f		<1:200	<1:200	>0<1:200	<1:200	<1:200
126	I	3	13	3.22	f		<1:200	<1:200	<1:200	<1:200	<1:200
127	I	3	13	0.38	m		n.d.	<1:200	<1:200	<1:200	<1:200
143	I	3	13	0.34	f		n.d.	<1:200	<1:200	<1:200	<1:200
151	I	3	13	2.50	f		<1:200	<1:200	<1:200	<1:200	<1:200
163	I	3	13	1.64	m		<1:200	<1:200	<1:200	<1:200	<1:200
23	II	3	13	6.75	f		<1:200	<1:200	<1:200	<1:200	<1:200
155	I	4	14	4.97	m		<1:200	1:500	1:200	<1:200	1:200
152	I	4	15	1.26	f		<1:200	<1:200	1:500	<1:200	1:200
10	II	4	15	2.02	m		<1:200	<1:200	1:2,000	<1:200	1:200
137	I	4	16	1.09	f		n.d.	<1:200	1:200	<1:200	>0<1:200
11	II	4	16	10.03	m		<1:200	<1:200	1:500	<1:200	>0<1:200
6	II	4	17	8.55	m		<1:200	1:200	1:1,000	<1:200	>0<1:200
144	I	4	18	1.12	f		n.d.	>0<1:200	1:200	<1:200	>0<1:200

ID, animal identity number; Herd: I – Thuringia (n = 64); II – Saxony Anhalt (n = 24); Gr, group; P, individual titre changes; IFA, indirect immunofluorescence assay (endpoint dilution); <1:200, dilution 1:200 tested negative; >0<1:200, dilution 1:200 tested intermediate; CPXV, cowpox virus; MVA, modified vaccinia virus Ankara; TP, time point (2 – four weeks after initial vaccination, 3 – four weeks after booster vaccination, 4 – six months after booster vaccination, 5 – 12 months after boost vaccination); n.d., not done (animal had not been born or was too young for sampling at the time of previous investigations performed by [16]); * results according to [16]; ** serum samples collected in a previous study [16], re-tested using IFA (MVA)