

Table S1: Optical density (OD) of indirect VP1 IgG ELISA displaying raw data from mice sera after immunisation with corresponding VLP constructs at three different timepoints: 0 (priming), 1 (21 days, first boost) and 2 (42 days, second boost). Indirect ELISA is performed with yeast-expressed VP1-protein as antigen. Controls include non-immunised (Co) and VP1/2 immunised mice

OD405	animal 1	animal 2	animal 3	animal 4	animal 5
Co-0	0.32	0.26	0.31	0.24	0.30
Co-1	0.41	0.20	0.22	0.22	0.19
Co-2	0.39	0.70	0.68	0.48	0.22
VP1/2-0	0.32	0.40	0.51	0.32	*
VP1/2-1	0.27	0.28	0.37	0.34	*
VP1/2-2	1.44	1.70	1.63	1.60	*
K1-0	1.22	1.60	1.06	1.22	1.19
K1-1	2.05	2.32	0.65	1.92	2.07
K1-2	0.72	2.10	0.54	1.69	1.49
K2-0	1.68	0.56	0.72	0.60	0.84
K2-1	1.94	0.52	0.88	2.11	1.96
K2-2	2.22	2.27	1.15	1.82	1.87
K3-0	0.33	0.70	1.10	0.91	1.55
K3-1	2.33	1.55	1.51	1.98	2.07
K3-2	2.24	1.37	1.67	1.67	1.99
K4-0	0.78	0.47	0.46	0.50	1.50
K4-1	1.31	1.27	2.08	1.21	2.08
K4-2	1.82	1.24	2.18	1.79	1.77
K5-0	0.88	0.46	0.46	0.76	*
K5-1	2.09	1.50	1.60	1.63	*
K5-2	2.03	1.51	1.50	1.56	*
K6-0	0.25	0.29	1.21	1.56	0.88
K6-1	1.95	2.01	0.58	0.56	0.36
K6-2	1.74	1.58	0.83	0.93	0.74
K7-0	0.96	0.31	1.71	1.54	1.02
K7-1	0.40	1.34	1.19	0.40	1.90
K7-2	0.73	1.27	1.55	0.78	1.45
K8-0	0.29	1.25	0.07	0.98	1.09
K8-1	2.17	2.04	1.96	1.74	0.08
K8-2	1.83	1.84	1.67	1.58	1.81
K9-0	1.39	0.20	0.22	0.24	0.26
K9-1	0.38	1.08	0.39	1.79	0.69
K9-2	0.70	1.80	0.68	1.71	1.71

* Mice that died from other causes than scrapie

Table S2: Survival time (individual values) of RML-infected C57/Bl6 mice immunised with virus-like particles.

Construct	Incubation time [days]					mean value	standard deviation	elongation [d] to untreated control	log rank test
	Animal 1	Animal 2	Animal 3	Animal 4	Animal 5				
control	209	197	200	200	202	201.6	4.5	-	-
VP1/2 control	203	211	218	223	*	213.75	8.7	12.15	0.017
Construct K1	232	204	281	197	267	236.2	37.2	34.6	n.s.
Construct K2	232	207	232	211	200	216.4	14.8	14.8	n.s.
Construct K3	207	209	134	210	207	193.4	33.2	-8.2	n.s.
Construct K4	210	223	162	211	218	204.8	24.5	3.2	n.s.
Construct K5	223	200	223	225	*	217.75	11.9	16.2	n.s.
Construct K6	232	210	197	202	209	210	13.4	8.4	n.s.
Construct K7	232	218	218	211	225	220.8	8.0	19.2	n.s.
Construct K8	204	210	217	211	217	211.8	5.4	10.2	n.s.
Construct K9	237	249	249	218	249	240.4	13.6	38.8	p≤0.015

* Mice that died from other causes than scrapie

Figure S1

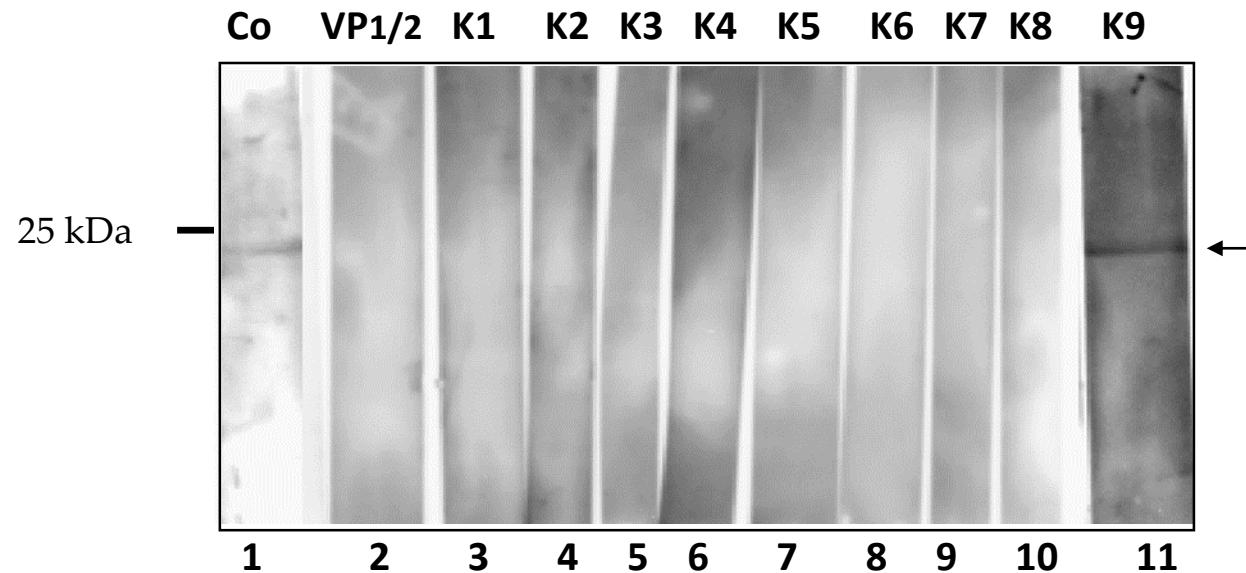


Figure S1. Western blot analysis of pooled sera from animals immunized with VP1/2 control (VP1, lane 2), K1 (lane 3), K2 (lane 4), K3 (lane 5), K4 (Lane 6), K5 (lane 7), K6 (lane 8), K7 (lane 9), K8 (lane 10), K9 (lane 11). Each lane contains blotted recombinant murine prion protein separated on an 16% SDS-PAGE and probed with corresponding serum pools. mAb SAF70 (lane 1) was used as a positive control (Co).

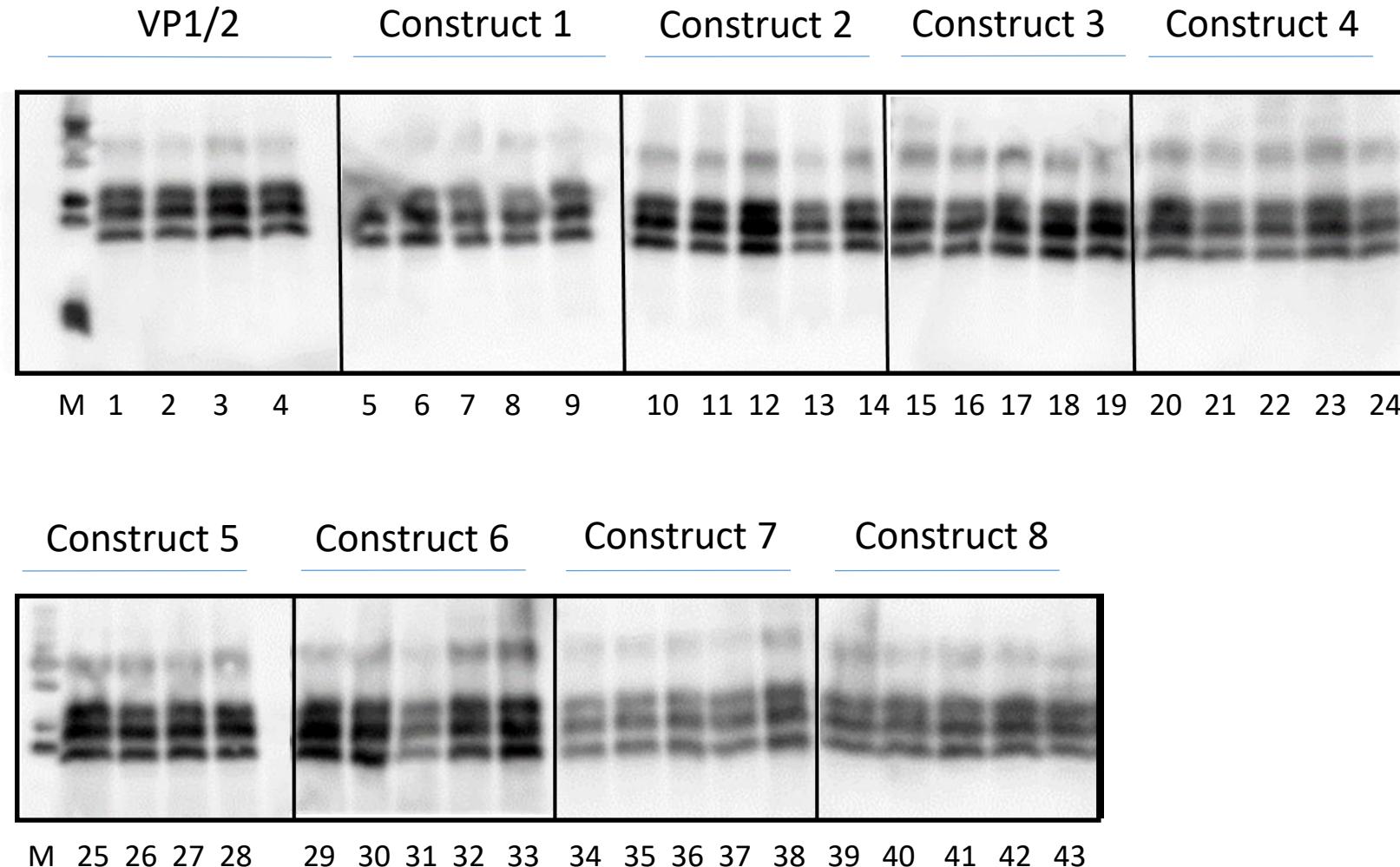


Figure S2. PrP^{Sc} accumulation in the brains of selected mice challenged with RML. Immunoblot analysis of RML-infected mouse brain homogenate digested with proteinase K (PK). PrP^{Sc} of scrapie infected mice after VP1/2 immunisation (lane 1-4), after immunisation with construct 1 (lanes 5-9), with construct 2 (lanes 10-14), with construct 3 (lanes 15-19), with construct 4 (lanes 20-24), with construct 5 (lanes 25-28), with construct 6 (lanes 29-33), with construct 7 (lanes 34-38) and with construct 8 (lanes 39-43) Detection of PrP^{Sc} was carried out with mAb SAF70. (M) molecular weight marker.