

Supplementary Table S1. Evaluation of the serological paratuberculosis diagnosis according to age and paratuberculosis epidemio-pathogenic (EP) forms. Estimates of sensitivity (Se), specificity (Sp), positive (PPV) and negative predictive values (NPV) with 95% confidence intervals (CI).

Paratuberculosis EP forms	N. of animals			ELISA test			
	ELISA-	ELISA+	Total	% Se	% Sp	% PPV	% NPV
Age group: 1							
Apparently free	5	0	5	—	100.0 (46.3, 100.0)	—	71.4 (30.3, 94.9)
Latent	1	0	1	0.0 (0.0, 94.5)	—	—	—
Patent	1	1	2	50.0 (2.7, 97.3)	—	—	—
Total	7	1	8	33.3 (1.8, 87.5)	—	100.0 (5.5, 100.0)	—
Age group: 2							
Apparently free	49	0	49	—	100.0 (90.9, 100.0)	—	73.1 (60.7, 82.9)
Latent	17	1	18	5.6 (0.3, 29.4)	—	—	—
Patent	1	6	7	85.7 (42.0, 99.3)	—	—	—
Total	67	7	74	28.0 (12.9, 49.6)	—	100.0 (56.1, 100.0)	—
Age group: 3							
Apparently free	82	1	83	—	98.8 (92.5, 99.9)	—	55.8 (47.4, 63.9)
Latent	63	1	64	1.6 (0.1, 9.5)	—	—	—
Patent	2	18	20	90.0 (66.9, 98.3)	—	—	—
Total	147	20	167	22.6 (14.5, 33.3)	—	95.0 (73.1, 99.7)	—
Age group: 4							
Apparently free	114	1	115	—	99.1 (94.6, 100.0)	—	54.0 (47.1, 60.9)
Latent	87	5	92	5.4 (2.0, 12.8)	—	—	—
Patent	10	10	20	50.0 (27.9, 72.2)	—	—	—
Total	211	16	227	13.4 (7.9, 21.4)	—	93.8 (67.7, 99.7)	—
Age group: 5							
Apparently free	78	2	80	—	97.5 (90.4, 99.6)	—	48.8 (40.8, 56.7)
Latent	78	3	81	3.7 (1.0, 11.2)	—	—	—
Patent	4	10	14	71.4 (42.0, 90.4)	—	—	—
Total	160	15	175	13.7 (7.8, 22.6)	—	86.7 (58.4, 97.7)	—
Age group: 6							
Apparently free	67	2	69	—	97.1 (89.0, 99.5)	—	60.9 (51.1, 69.9)
Latent	41	0	41	0.0 (0.0, 10.7)	—	—	—
Patent	2	6	8	75.0 (35.6, 95.6)	—	—	—
Total	110	8	118	12.3 (5.1, 25.5)	—	75.0 (35.6, 95.6)	—
Age group: 7							
Apparently free	46	0	46	—	—	—	—
Latent	30	0	30	—	—	—	—
Patent	2	0	2	—	—	—	—
Total	78	0	78	—	—	—	—
Age group: 8							
Apparently free	27	1	28	—	96.4 (79.8, 99.8)	—	64.3 (48.0, 78.0)
Latent	15	0	15	0.0 (0.0, 25.4)	—	—	—
Patent	0	1	1	100.0 (5.5, 100.0)	—	—	—
Total	42	2	44	6.3 (0.3, 32.3)	—	50.0 (2.7, 97.3)	—
Age group: 9							
Apparently free	21	0	21	—	100.0 (80.8, 100.0)	—	51.2 (35.4, 66.9)
Latent	19	1	20	5.0 (0.3, 26.9)	—	—	—
Patent	1	1	2	50.0 (2.7, 97.3)	—	—	—
Total	41	2	43	9.1 (1.6, 30.6)	—	100.0 (19.8, 100.0)	—
Age group: 10							
Apparently free	15	2	17	—	88.2 (62.3, 97.9)	—	65.2 (42.8, 82.8)
Latent	8	1	9	11.1 (0.6, 49.3)	—	—	—
Patent	0	0	0	—	—	—	—
Total	23	3	26	11.1 (0.6, 49.3)	—	33.3 (1.8, 87.5)	—
Age group: 11							
Apparently free	13	0	13	—	—	—	—
Latent	13	0	13	—	—	—	—
Patent	0	0	0	—	—	—	—
Total	26	0	26	—	—	—	—