

| Classical | -20 dB (milisec) Baseline | -20 dB (milisec) 12 MPI | 0 dB (milisec) Baseline | 0 dB (milisec) 12 MPI | OCT (uM) Baseline | OCT (uM) 12 MPI | Incubation Time (Months) | 23 bp indel | 12 bp indel |
|-----------|---------------------------------|-------------------------------|-------------------------------|-----------------------------|----------------------|--------------------|--------------------------------|----------------|----------------|
| 6825 | 37.3 | 59.2 | 25.4 | 30.5 | | | 21.0 | +/- | +/- |
| 6826 | 54.8 | 76.8 | 24.8 | 35.8 | 255 | | 17.8 | -/- | -/- |
| 6830 | 63.3 | 49.4 | 35.8 | 31.8 | 306 | 241 | 31.3 | +/- | +/- |
| 6836 | 59.5 | 67.3 | 25.2 | 39.5 | | | 21.3 | +/+ | +/+ |
| 6847 | 57.5 | 61.3 | 31.3 | 25.3 | | | 22.9 | -/- | -/- |
| 6850 | 59.7 | 61 | 32.4 | 37.0 | | | 31.3 | -/- | -/- |
| 6862 | 56.8 | 65.8 | 25.6 | 34.3 | | | 17.3 | +/+ | +/+ |
| 6865 | 52.0 | 63.2 | 29.8 | 32.3 | | | 29.5 | +/+ | +/+ |
| 6870 | 53.3 | 61.8 | 34.5 | 49.0 | 303 | 232 | 17.6 | +/- | +/- |
| 6877 | 55.7 | 66.7 | 24.5 | 40.7 | | | 23.8 | +/- | +/- |
| 6992 | 54.2 | 63 | 24.3 | 30.5 | | | 21.3 | +/+ | +/+ |
| 6864 | | | | | 303 | 246 | 17.9 | -/- | -/- |
| | | | | | | | | | |
| Means | 54.9 | 63.2 | 28.5 | 35.1 | 288.4 | 243.8 | | | |
| | | | | | | | | | |
| BSE-H | -20 dB (milisec) Baseline | -20 dB (milisec) 12 MPI | 0 dB (milisec) Baseline | 0 dB (milisec) 12 MPI | OCT (uM) Baseline | OCT (uM) 12 MPI | Incubation Time (Months) | 23 bp indel | 12 bp indel |
| 6873 | 52.3 | 65.5 | 28.3 | 39 | | | 17.7 | -/- | -/- |
| 6874 | 59.6 | | 29.3 | | | | 16.8 | +/- | +/- |
| 6880 | 59.1 | 87 | 27.9 | 56.7 | 326.0 | 264.7 | 16.3 | -/- | -/- |
| 6881 | 49.8 | | 25.0 | | 260.8 | 230.6 | 17.0 | -/- | -/- |
| 6911 | 50.33 | 60.8 | 24.5 | 34.8 | 317.7 | 265.8 | 17.0 | +/+ | +/+ |
| 6912 | 49.4 | 72.5 | 23.7 | 32.5 | | | 17.0 | +/- | +/- |
| 6913 | 50.3 | | 21.9 | | | | 16.8 | +/- | +/- |
| 6973 | 54.0 | 68.3 | 23.5 | 44.8 | 328.8 | 321.5 | 17.7 | +/+ | +/+ |
| 7012 | 47.2 | 73.7 | 24.3 | 42.2 | 320.3 | 280.2 | 17.7 | -/- | -/- |
| | | | | | | | | | |
| Mean | 52.7 | 55.38 | 25.4 | 41.7 | 302.2 | 272.8 | | | |

| | -20dB Baseline | -20dB 12 MPI | 0dB Baseline | 0dB 12 MPI | OCT Baseline | OCT 12 MPI | |
|--------------------|-------------------|-----------------|-----------------|---------------|-----------------|----------------|--|
| Control Animals | | | | | 302. | | |
| | | | | | 290. | | |
| | | | | | 290. | | |
| | | | | | 295. | | |
| | | | | | 320. | | |
| | | | | | 286. | | |
| | | | | | 294. | | |
| | | | | | 268. | | |
| | | | | | | | |
| Pooled Means | 53.99 (1.3) | 66.8 (2.0) | 27.1 (0.9) | 37.5 (1.9) | 303.4 (5.3) | 259.9 (9.5) | |
| | | | | | | | |
| 95% CI | | 61.8-70.3 | | 33.5-41.4 | | 238-282 | |
| | | | | | | | |
| False positives | 1/19 | | 2/20 | | 2/13 | | |
| Specificity | 94.7% | | 90% | | 84.6% | | |
| | | | | | | | |
| Positive positives | | 18/19 | | 16/17 | | 8/9 | |
| Sensitivity | | 94.7% | | 94.1% | | 88.9% | |

Supplementary Table 1: Summary of Individual Animal Data. Data for each animal includes baseline and 12 MPI values for ERG and OCT, incubation time and indel 12 and indel 23 genotype. Standard error for pooled means is in parenthesis. From the baseline and 12MPI data 95% CI was calculated and applied to each individual to estimate a specificity and sensitivity for this assay to detect BSE inoculated animals at 12 MPI.