

Auditory Brainstem Response (ABR)

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Hearing sensitivity was assessed across a broad range of frequencies in anaesthetised mice, with recovery. ABRs were recorded via subcutaneous needle electrodes placed at the vertex and behind the left ear and with the ground electrode behind the right ear, as an average of 256 responses to presentation of free field stimuli [clicks (10 μ s) or tone pips (5ms tone pips, 1ms rise/fall time)], presented at 42.2/sec. ABR Thresholds were visually determined and plotted as a function of stimulus frequency (kHz). Mean thresholds were also plotted (+/- population standard deviation) (see Ingham et al. 2011).

The assay was performed at either 13 or 14 weeks, dependent upon the pipeline, with either Avertin or Ketamine/Xylazine as the anaesthetic. The diet the mice were on was pipeline dependant. On most pipelines the mice were also examined for body composition (DEXA) and x-ray imaging while anaesthetised. The interval changed from 3db to 5db when it became part of the DEXA/Faxitron workflow to reduce the time.

On average 4 mice were tested per colony, regardless of sex.