Table 1. Test protocol for measurement of frequency-specific auditory brainstem response elicited with click and tone-burst stimuli (see Hall, 2007 for detailed review and rationale for each parameter in the test protocol).

Stimulus Parameters

Transducer Insert (ER-3A earphones)

Polarity Alternating (rarefaction can also be used)

Ramping Blackman

Duration

Click 0.1 ms

Tone burst 2 cycles – 0 cycles – 2 cycles

Presentation rate

Click 21.1/sec

Tone burst 27.7/sec

Intensity Variable from maximum to 0 dB nHL

Number of stimuli Variable depending on the size of the response and

the amount of electrical and myogenic noise (the

signal-to-noise ratio

Acquisition Parameters

Electrode Sites

Non-inverting Fz (high forehead)

Inverting Ai (earlobe of stimulus ear)

Common Ground electrode on low forehead

Electrode Types Re-usable metal or disposable electrodes

Filter settings 30 to 3000 Hz

Notch filter Off

Analysis Time

15 ms (click and 4000 Hz tone burst) 20 ms (lower frequency tone bursts)

Pre-stimulus Time - 1 ms

Sweeps Variable depending on the size of the response and

the amount of electrical and myogenic noise (the

signal-to-noise ratio