

Supplemental Data

Sensorineural Deafness and Seizures in Mice

Lacking Vesicular Glutamate Transporter 3

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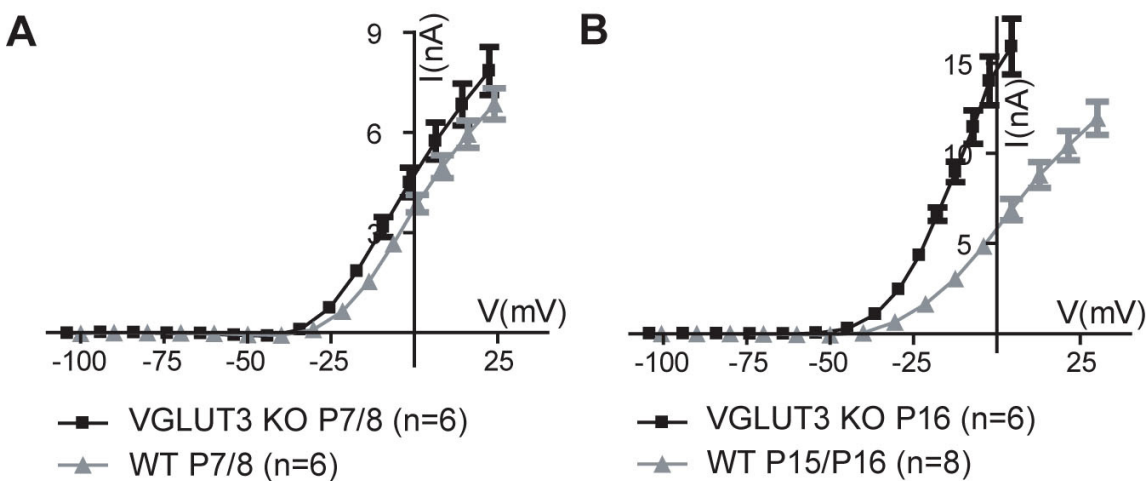


Figure S1. IHC Potassium Conductances in VGLUT3 KO and WT Mice

Current-voltage relationships for IHCs of VGLUT3 KO and WT mice at P7/8 (before onset of hearing) (A) and P16 (after hearing onset) (B). Current amplitudes were measured at the end of 100 ms voltage steps, and the values indicate mean \pm S.E. For both VGLUT3 KO and WT mice, current amplitudes increase significantly with age ($p < 0.01$). At P15/16, however, potassium current amplitudes in VGLUT3 KO mice were significantly larger than in WT mice ($p < 0.01$). Voltages were corrected for the error across the remaining uncompensated series resistance ($< 5 \text{ M}\Omega$) and currents plotted against the mean voltage reached for each voltage step. For statistical analysis, data were binned according to actual voltage reached (bin width = 4 mV). Error bars indicate the standard error of the mean.