

Supplementary Table 1. ABR thresholds for *Myo3a*^{K^{+/K}} mice and their wildtype littermates

mouse genotype	months	5.6 kHz	8 kHz	11.3 kHz	16k Hz	32 kHz	40 kHz
88 wt	2.5	30	25	15	25	45	60
125 wt	2.5	25	25	10	25	40	45
139 wt	2.5	25	20	10	20	35	25
143 wt	2.5	30	25	10	25	65	75
156 wt	2.5	25	25	5	15	20	20
159 wt	2.5	35	25	5	15	20	30
167 wt	2.5	30	25	10	20	25	15
86 mutant	2.5	40	25	20	40	30	90
87 mutant	2.5	40	30	15	25	15	50
89 mutant	2.5	35	20	20	30	40	85
99 mutant	2.5	35	30	20	25	35	85
102 mutant	2.5	40	30	20	25	30	40
103 mutant	2.5	45	40	25	25	40	50
127 mutant	2.5	35	20	10	25	65	75
133 mutant	2.5	30	20	5	30	55	75
144 mutant	2.5	30	30	10	30	40	80
145 mutant	2.5	30	25	20	25	40	65
146 mutant	2.5	25	20	15	30	25	50
148 mutant	2.5	30	35	15	30	40	80
158 mutant	2.5	35	30	10	25	45	60
163 mutant	2.5	35	25	10	25	25	40
avg wt	2.5	29	24	9	21	36	39
avg mutant	2.5	35	27	15	28	38	66
P(wt v mutant)	2.5	0.015	0.247	0.019	0.002	0.784	0.006
88 wt	5.0	35	25	10	20	65	70
125 wt	5.0	35	25	15	20	55	85
139 wt	5.0	30	20	5	20	70	75
143 wt	5.0	30	25	15	20	75	75
156 wt	5.0	35	30	15	15	45	70
159 wt	5.0	35	30	20	15	25	25
167 wt	5.0	30	25	20	20	20	15
125b wt	5.0	30	25	20	20	65	80
86 mutant	5.0	35	30	40	40	80	85
87 mutant	5.0	35	40	25	45	55	90
89 mutant	5.0	35	25	35	50	80	75
99 mutant	5.0	45	35	50	40	75	80
102 mutant	5.0	35	30	30	30	70	85
103 mutant	5.0	45	40	20	15	45	45
127 mutant	5.0	40	25	10	25	70	85
133 mutant	5.0	40	35	25	35	75	90
144 mutant	5.0	40	40	55	35	70	75
145 mutant	5.0	35	35	40	30	55	70
146 mutant	5.0	30	25	30	35	65	75
148 mutant	5.0	40	35	45	35	65	85
158 mutant	5.0	45	40	35	30	90	90
163 mutant	5.0	25	25	35	25	45	65
102b mutant	5.0	30	30	30	35	65	80
103b mutant	5.0	45	35	15	15	35	35
127b mutant	5.0	40	20	20	20	80	85
133b mutant	5.0	35	30	25	25	80	80
avg wt	5.0	33	26	15	19	53	62
avg mutant	5.0	38	32	31	31	67	76
P(wt v mutant)	5.0	0.000	0.000	0.007	0.201	0.556	0.180
88 wt	7.5	45	35	20	30	80	85
125 wt	7.5	30	25	15	20	60	80
139 wt	7.5	30	20	15	25	60	65
143 wt	7.5	30	30	20	25	60	60
156 wt	7.5	30	20	15	20	65	75
159 wt	7.5	40	35	20	20	35	40
167 wt	7.5	25	25	10	20	20	25
86 mutant	7.5	40	35	35	45	70	90
87 mutant	7.5	40	35	40	50	70	90
89 mutant	7.5	40	35	45	40	80	80

mouse genotype	months	5.6 kHz	8 kHz	11.3 kHz	16k Hz	32 kHz	40 kHz
99 mutant	7.5	45	30	50	45	80	80
102 mutant	7.5	35	35	50	35	85	85
103 mutant	7.5	40	40	30	20	40	50
127 mutant	7.5	35	30	15	25	70	83
133 mutant	7.5	45	40	35	50	80	85
144 mutant	7.5	45	45	55	55	78	78
145 mutant	7.5	45	55	50	45	75	78
146 mutant	7.5	35	35	40	40	70	75
148 mutant	7.5	50	55	55	50	78	78
158 mutant	7.5	35	30	30	30	75	82
163 mutant	7.5	50	35	55	35	75	80
avg wt	7.5	33	27	16	23	54	61
avg mutant	7.5	41	38	42	40	73	80
P(wt v mutant)	7.5	0.005	0.006	0.000	0.000	0.010	0.015
88 wt	10.0	45	30	15	30	75	85
125 wt	10.0	30	25	15	30	70	75
139 wt	10.0	35	25	20	55	70	85
143 wt	10.0	40	30	20	45	70	85
156 wt	10.0	35	35	15	75	80	85
159 wt	10.0	45	30	10	35	70	75
167 wt	10.0	40	20	10	15	35	80
86 mutant	10.0	55	45	45	55	85	85
87 mutant	10.0	40	40	40	45	85	85
89 mutant	10.0	35	45	50	50	85	85
99 mutant	10.0	35	35	40	50	75	80
102 mutant	10.0	45	40	55	60	85	85
103 mutant	10.0	55	55	65	35	70	85
127 mutant	10.0	40	30	25	65	80	85
133 mutant	10.0	50	40	40	80	85	85
144 mutant	10.0	80	85	85	85	85	85
145 mutant	10.0	50	45	45	35	70	85
146 mutant	10.0	40	35	25	35	75	85
148 mutant	10.0	50	45	50	55	80	85
158 mutant	10.0	50	30	30	60	85	85
163 mutant	10.0	40	35	30	50	70	85
avg wt	10.0	39	28	15	41	67	81
avg mutant	10.0	48	43	45	54	80	85
P(wt v mutant)	10.0	0.070	0.011	0.000	0.097	0.012	0.027
88 wt	13.0	40	30	15	35	80	85
125 wt	13.0	55	45	30	50	85	85
139 wt	13.0	45	40	35	75	85	85
143 wt	13.0	60	50	50	80	85	85
156 wt	13.0	55	40	55	75	85	85
159 wt	13.0	55	25	25	25	75	85
86 mutant	13.0	55	40	40	65	85	85
87 mutant	13.0	40	50	45	50	80	85
89 mutant	13.0	45	35	35	70	80	80
99 mutant	13.0	45	50	45	50	85	85
102 mutant	13.0	35	30	50	55	85	85
103 mutant	13.0	35	35	35	35	75	85
127 mutant	13.0	70	65	70	75	85	80
133 mutant	13.0	80	75	60	75	85	80
144 mutant	13.0	55	50	55	60	85	
145 mutant	13.0	70	60	70	50	85	85
146 mutant	13.0	55	70	60	65	85	85
148 mutant	13.0	45	50	55	50	85	
158 mutant	13.0	65	50	45	60	85	85
163 mutant	13.0	55	45	50	60	80	85
avg wt	13.0	52	38	35	57	83	85
avg mutant	13.0	54	50	51	59	83	84
P(wt v mutant)	13.0	0.756	0.062	0.017	0.805	0.679	0.201