Supplemental Table S2. Non-social behavior statistics. Bold indicates significant effects, italics indicate trends.

	Marble Burying		
Analysis	Effect	Statistics in Females	Statistics in Males
2 (genotype) x 2 (condition) ANOVA on % marbles 2/3+ buried	genotype	$F(1,65)<0.01$, $p=0.999$	**$F(1,56)=7.51$, $p=0.008$**
	condition	$F(1,65)=0.04$, $p=0.834$	$F(1,56)=0.66$, $p=0.420$
	genotype x condition	$F(1,65)=1.79$, $p=0.186$	$F(1,56)=1.24$, $p=0.270$
Genotype *t*-test (% marbles 2/3+ buried)	Standard-housed	$t(29)=1.02$, $p=0.319$	**$t(28)=3.09$, $p=0.004$**
	EE-housed	$t(36)=0.92$, $p=0.365$	$t(28)=1.04$, $p=0.307$
Condition *t*-test (% marbles 2/3+ buried)	*Pten*^{+/+}	$t(36)=0.79$, $p=0.436$	$t(28)=0.24$, $p=0.815$
	Pten^{+/-}	$t(29)=1.14$, $p=0.264$	$t(28)=1.25$, $p=0.222$
	Open Field Test		
Analysis	Effect	Statistics in Females	Statistics in Males
2 (Genotype) x 2 (Condition) x 2 (Thigmotaxis) ANOVA	genotype	$F(1,67)=0.56$, $p=0.456$	$F(1,55)=0.48$, $p=0.490$
	condition	$F(1,67)=2.16$, $p=0.146$	$F(1,55)=2.02$, $p=0.161$
	thigmotaxis	**$F(1,67)=3094.75$, $p<0.001$**	**$F(1,55)=3550.69$, $p<0.001$**
	genotype x condition	$F(1,67)=0.19$, $p=0.663$	$F(1,55)=0.27$, $p=0.608$
	genotype x thigmotaxis	$F(1,67)=1.13$, $p=0.291$	$F(1,55)=0.28$, $p=0.602$
	condition x thigmotaxis	$F(1,67)=1.98$, $p=0.163$	$F(1,55)=0.06$, $p=0.810$
	genotype x condition x thigmotaxis	$F(1,67)=0.52$, $p=0.473$	$F(1,55)=0.01$, $p=0.938$
2 (Genotype) x 2 (Condition) ANOVA: % center time	genotype	$F(1,67)=1.15$, $p=0.288$	$F(1,55)=0.13$, $p=0.719$
	condition	$F(1,67)=1.95$, $p=0.168$	$F(1,55)=0.25$, $p=0.619$
	genotype x condition	$F(1,67)=0.53$, $p=0.471$	$F(1,55)<0.01$, $p=0.976$
2 (Genotype) x 2 (Condition) ANOVA: distance traveled	genotype	$F(1,67)=0.36$, $p=0.549$	$F(1,55)=0.14$, $p=0.714$
	condition	**$F(1,67)=14.03$, $p<0.001$**	**$F(1,55)=5.84$, $p=0.019$**
	genotype x condition	$F(1,67)=0.04$, $p=0.834$	**$F(1,55)=6.52$, $p=0.013$**
	Post hocs	n/a	Std, WT vs *Pten*^{+/-}: $p=0.125$
		n/a	EE, WT vs *Pten*^{+/-}: **$p=0.045$**
		n/a	WT, Std vs EE: $p=0.924$
		n/a	*Pten*^{+/-}, Std vs EE: **$p=0.001$**
Genotype *t*-test: Standard-housed	% center time	$t(30)=0.25$, $p=0.801$	$t(28)=0.30$, $p=0.769$
	distance traveled	$t(30)=0.47$, $p=0.641$	$t(28)=1.46$, $p=0.155$
Genotype *t*-test: EE-housed	% center time	$t(37)=1.26$, $p=0.216$	$t(27)=0.24$, $p=0.816$
	distance traveled	$t(37)=0.35$, $p=0.732$	**$t(27)=2.21$, $p=0.036$**

Condition *t*-test: *Pten*^{+/+}	% center time	*t(37)=1.79, p=0.082*	*t(27)=0.34, p=0.737*
	distance traveled	**_t(37)=2.94, p=0.006_**	*t(27)=0.11, p=0.911*
Condition *t*-test: *Pten*^{+/-}	% center time	*t(30)=0.40, p=0.691*	*t(28)=0.37, p=0.716*
	distance traveled	**_t(30)=2.39, p=0.023_**	**_t(28)=3.15, p=0.004_**
Paired-sample t-test (% time in center vs thigmotaxis): *Pten*^{+/+}	Standard-housed	**_t(16)=38.60, p<0.001_**	**_t(14)=33.75, p<0.001_**
	EE-housed	**_t(21)=30.08, p<0.001_**	**_t(13)=27.44, p<0.001_**
Paired-sample t-test (% time in center vs thigmotaxis): *Pten*^{+/-}	Standard-housed	**_t(14)=24.17, p<0.001_**	**_t(14)=37.31, p<0.001_**
	EE-housed	**_t(16)=23.92, p<0.001_**	**_t(14)=24.90, p<0.001_**