

Rare form of autism exhales secrets of breathing

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Fig. 1: Survival and locomotor abnormalities exhibited by Tcf4tr/+ mice. A Mouse images and summary data show that Tcf4tr/+ and Tcf4tr/tr mice are smaller and weigh less early in development compared to Tcf4+/+ control mice (day 3: F2,27 = 56.86, p 0.05, paired t-test, data are presented as mean values \pm SEM). B Survival curves show that ~30% of Tcf4tr/tr mice are born dead and



reach 100% lethality by 4 days of age. Tcf4tr/+ also exhibit early high mortality but those reaching weaning age tended to survive at least two months. C Representative locomotor activity maps of Tcf4+/+ and Tcf4tr/+ mice (40–50 days of age) during a 30-min periods following placement in a novel open field arena. D, E summary data show that Tcf4tr/+ traveled further (D n = 15 biologically independent animals, mixed sex, T14 = 4.008, p = 0.0013, paired t-test, data are presented as mean values \pm SEM) and more frequently entered the center region (middle 50% of total area) (E n = 15 biologically independent animals, mixed sex, T14 = 2.559, p = 0.0227, paired t-test, data are presented as mean values \pm SEM) compared to Tcf4+/+. Asterisk (*) indicate different between genotypes (unpaired t-test). One symbol = p

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