

Click box video files

C3C6DKO click box

C3KO click box

C6KO click box

Wildtype click box

Legend

Mice were acclimatized to the environment for 1 hour and their response to a click box stimulus (90dsb, 20kHz) was videotaped. The responses were scored blind as described in the methods, an example recording from each genotype is shown in the supplementary material.

Wildtype mouse displays a Preyer reflex with both ears going flat against the head in response to the click box, this can also be accompanied by flinching. TRPC3 knockout mice and TRPC6 knockout mice also display a strong Preyer reflex. TRPC3/TRPC6 double knockout mice do not respond to the stimulus with a Preyer reflex, both ears remain static.

Swim test video files

C3C6DKO swim test

Wildtype swim test

Legend

Mice were put into deep water and observed for 1 minute for swimming behaviour (as described in methods).

Wildtype mice are able to swim immediately and effectively. TRPC3/TRPC6 null mice have a delay in swimming behaviour and show some signs of balance problems in the water.