

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: *Trpm5*^{-/-} mice display prolonged latency of the righting reflex compared to controls.

File Name: Supplementary Movie 2

Description: *Trpm5*^{-/-} mice (P12) display a decreased swimming performance compared to controls.

File Name: Supplementary Movie 3

Description: *Trpm5*-ShRNA mice (P11) display strong deficits in the postural tone of hindlimbs compared to control-ShRNA.

File Name: Supplementary Movie 4

Description: *Trpm5*-ShRNA mice (P10) display strong deficits in the righting reflex compared to control-ShRNA.

File Name: Supplementary Movie 5

Description: *Trpm5*-ShRNA mice (P12) display a decreased swimming performance compared to control-ShRNA.