**Supplementary Movie S1: Dendritic trafficking of Rab7a-GFP labeled vesicles in controls**

Live imaging of primary hippocampal neurons (DIV6+3) transfected with Ctrl shRNA and Rab7a-GFP to visualize late endosomal / lysosomal trafficking in dendrites. Most vesicles remain in place. The soma is on the right.

**Supplementary Movie S2: Dendritic trafficking of Rab7a-GFP labeled vesicles upon TMEM106B knockdown**

Live imaging of primary hippocampal neurons (DIV6+3) transfected with TMEM106B shRNA #2 and Rab7a-GFP to visualize late endosomal / lysosomal trafficking in dendrites. Note that vesicles are more mobile than in controls (Supplementary Movie S1) and preferentially move towards the soma on the right.