Appendix Fig.S1

A Dendrite



**Appendix Figure S1** Early endosomal localisation of endocytosed APP (10 min) and non-recycled BACE1 in neurons.

(A) Endocytosed APP (green) detected with 22C11 (10 min pulse) in EEA1-positive early endosomes (magenta) in dendrites of siCD2AP- and siControl-treated neurons expressing APP-RFP, analysed by spinning-disk confocal microscopy. Scale bar, 10  $\mu$ m. Quantification of colocalisation between endocytosed APP and EEA1 in dendrites is shown below (n=3, N<sub>siControl</sub>=19, N<sub>siCD2AP</sub>=20, mean ± SEM).

(**B**) Non-recycled BACE1 (green) detected with M1 (15 min pulse, acid stripping and 20 min chase) in Rab5-positive early endosomes (magenta) in dendrites of siBin1- and siControl-treated neurons expressing Rab5-mCherry and BACE1-GFP analysed by spinning-disk confocal microscopy. Scale bar, 10  $\mu$ m. Quantification of colocalisation between non-recycled BACE1 and Rab5 in dendrites is shown below (n=3, N<sub>siControl</sub>=18, N<sub>siBin1</sub>=24; mean ± SEM).