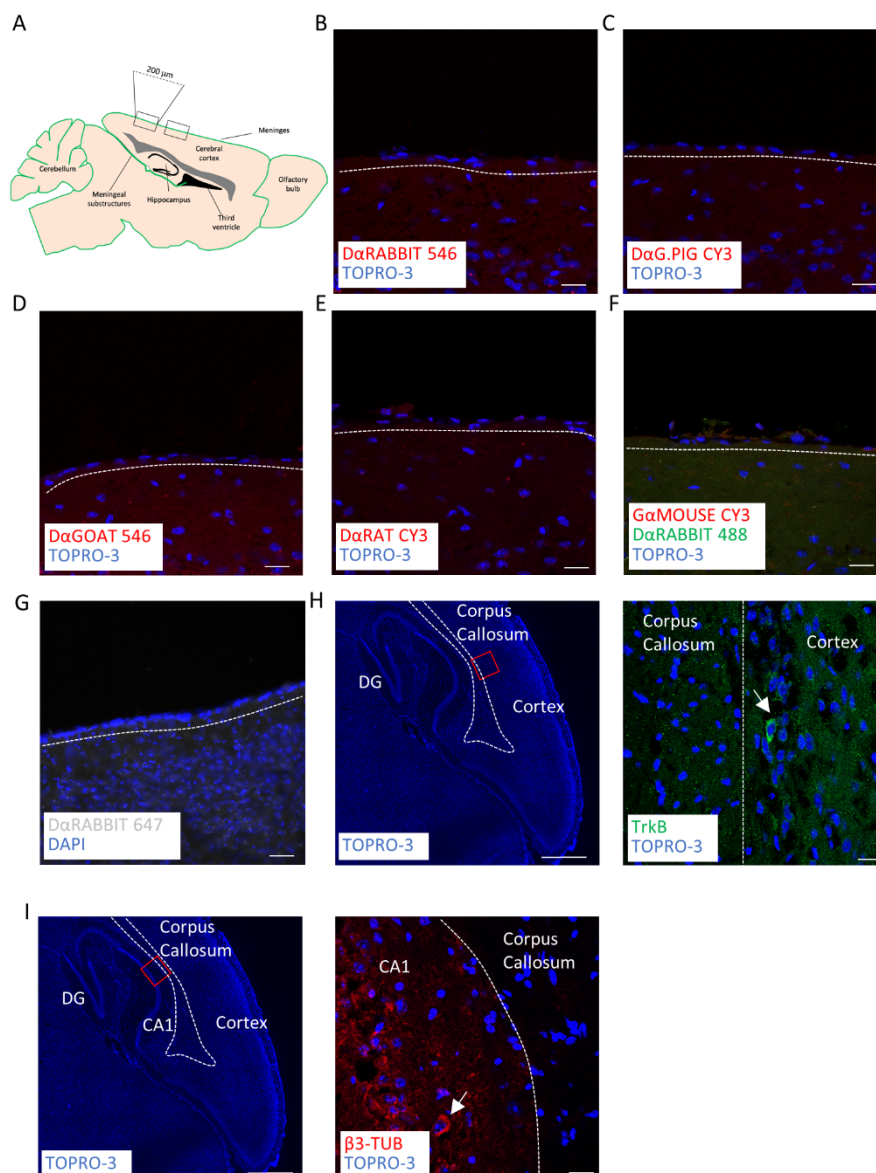


**Figure S1** – Enriched environment doesn't induce proliferative changes in meninges (A) Sagittal brain sections of CD1 mice showing Ki67+ (red) cells above meningeal basal lamina (green) in CTRL and EE mice. An insert illustrates a panoramic image where the single-cell level image was taken. (B) Graph showing the number of nuclei in 2mm of retrosplenial brain meninges of CTRL and EE animals. (C) Graph showing the number of Ki67 + cells in 2mm of retrosplenial brain meninges of CTRL and EE animals. Data are presented as mean  $\pm$  SEM; n.s. = not statistically significant. In picture A nuclei are in blue (TOPRO-3 nuclear staining). Pictures A are maximum intensity projections of z-stack confocal images. Scale bars represent 20 $\mu$ m (A) and 100 $\mu$ m (A, insert). White arrows indicate positive cells.



**Figure S2** – Immunofluorescence negative controls (A) Scheme depicting the sagittal section of mouse brain highlighting the specific regions where brain external meninges were analyzed. (B-G) Sagittal brain sections of CD1 mice showing no staining when using only the secondary antibodies without any primary antibodies. The secondary antibodies here shown are Donkey $\alpha$ Rabbit Alexa Fluor 546 (B), Donkey $\alpha$ Guinea Pig CY3 (C), Donkey $\alpha$ Goat Alexa Fluor 546 (D), Donkey $\alpha$ Rat CY3 (E), Goat $\alpha$ Mouse CY3 and Donkey $\alpha$ Rabbit Alexa Fluor 488 (F) and Donkey $\alpha$ Rabbit Alexa Fluor 647 (G). (H) Sagittal brain section of CD1 mice showing correct TrkB staining in brain cortex, while showing no staining in Corpus Callosum. (I) Sagittal brain section of CD1 mice showing correct  $\beta$ 3-Tubulin staining in hippocampal CA1 area, while showing no staining in Corpus Callosum. All pictures are single plane confocal images. (B-I) Nuclei are shown in blue (TOPRO-3 nuclear staining). Scale bars represent 20 $\mu$ m (B, C, D, E, F, G). In pictures H and I the scale bar for the panoramic image represents 500 $\mu$ m (left), while the scale bar for the magnification is 20 $\mu$ m (right). White arrows indicate positive cells