A novel natural product inspired scaffold with robust neurotrophic, neurogenic and neuroprotective action

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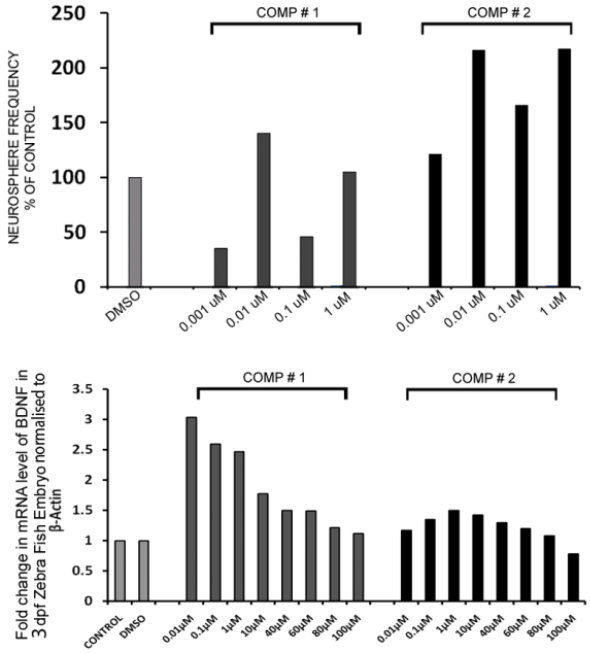
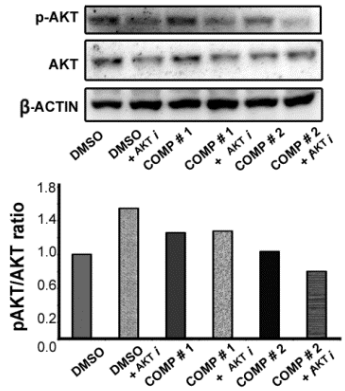
Suppl fig 1.



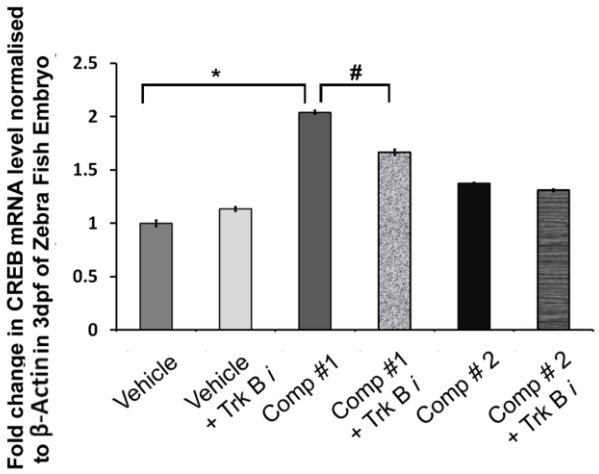
Supplementary fig.1: Dose titration for ex vivo and in vivo experiments. Upper panel showed the neurosphere assay by using mouse hippocampal precursor cell populations subjected to different concentrations of the compounds from [0.001μM to 1.0 μM]; whereas lower panel showed Bdnf gene expression level in Zebrafish embryos treated with different concentrations of the compounds [0.01μM to 100 μM]. Please note that the most optimum concentrations [0.01 μM for mouse primary culture, 1.0 μM for zebrafish emryo experiments] were selected for main experiment. To decide the exact dose, similar methods were followed in other experiments too.

Suppl fig 2.



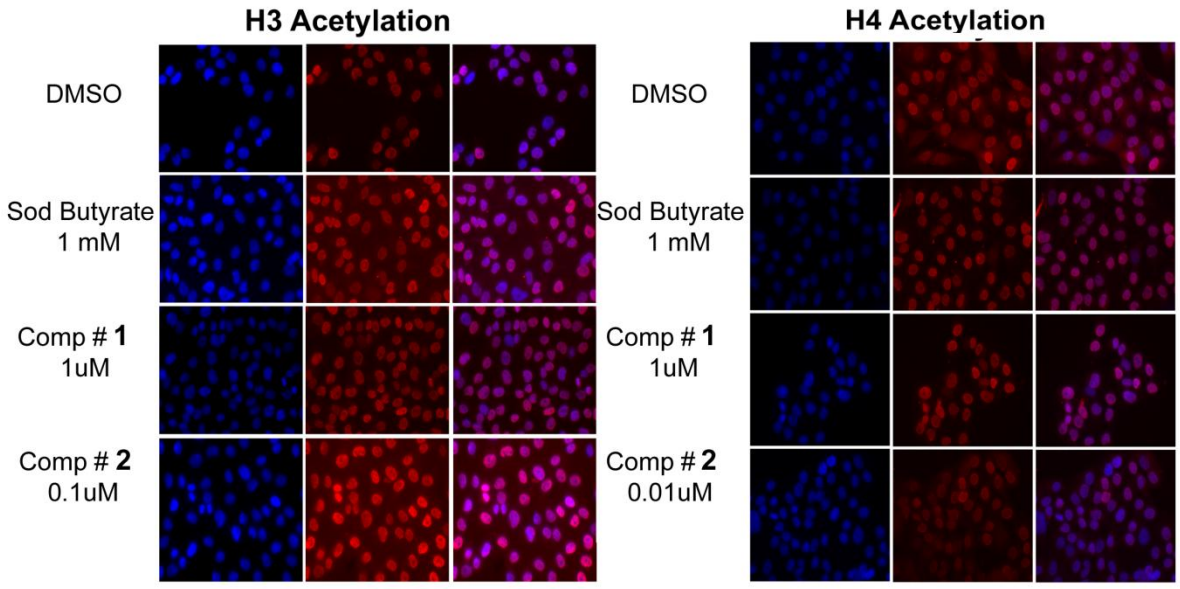
Supplementary fig.2: Immunoblot for pAKT and AKT. Expression levels of p-AKT/AKT in Neuro2A cells treated with comp #1, #2 (0.01µM), pretreated with or without AKT inhibitor (LY294002) (20µM).

Suppl fig 3.



Supplementary fig.3: RT-PCR data for Creb upon Trk B inhibitor treatment. Shown here is the graphical representation for the mRNA expression level of Creb normalized with β-Actin in 3 dpf of Zebrafish embryo upon treatment with/without TrK B inhibitor ANA-12.

Suppl fig 4.



Supplementary fig.4: Immunocytochemistry for acetyl H3, H4 and DAPI. Shown are the representative images for Acetyl H3, H4 and DAPI staining in IMR-32 cells treated with Vehicle (DMSO 1%), Sodium butyrate (1mM), Comp#1 (1µM), Comp#2 (0.1, 0.01µM).