

Neurite Outgrowth Assay using Embryonic Rat Hippocampal Neurons

Compound testing for the following indications:

- Neurite outgrowth
- Neuroplasticity

Model:

Primary E18 rat hippocampal neurons are cultured under serum free conditions in the presence or absence of compounds on poly-ornithine coated glass coverslips. After a defined culture period, cultures are fixed with para-formaldehyde and are immunolabelled using a primary anti-betaIII tubulin antibody. Labelled cells are imaged and the longest neurite and the total length of neurites per cell are evaluated using Image Pro Plus software.

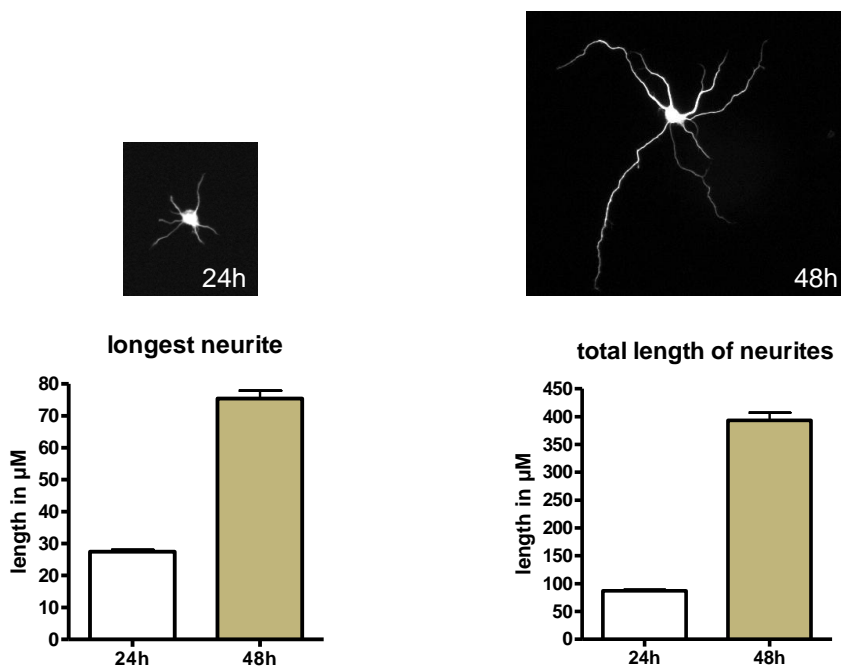


Fig.1. Neurite outgrowth of E18 primary hippocampal neurons for 24 hours and 48 hours. The total length of neurites and the longest neurite per cell is determined after 24 hours or 48 hours in μM.