

## Oxygen and Glucose Deprivation (OGD) in Organotypic Rat Hippocampal Slice Cultures

Compound testing for the following indications:

- Stroke
- Ischemia
- Alzheimer's Disease
- Neuroprotection

Model:

Rat hippocampal slices generated from P6 pups are matured in vitro and are then deprived for oxygen and glucose in a hypoxia chamber for a defined period of time. Control slices are maintained under normal culture conditions. The effect of test compounds on oxygen and glucose deprived neurons can be assessed by Propidium Iodide (PI) labelling after re-oxygenation.

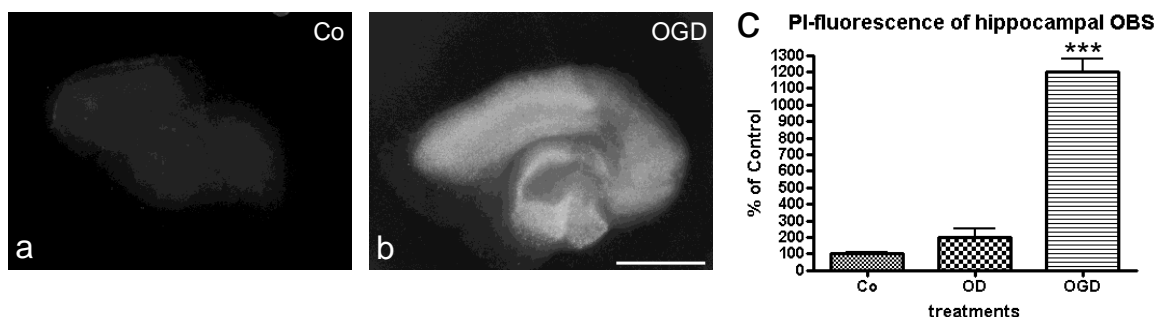


Fig.1. Oxygen and glucose deprivation in organotypic rat hippocampal slice cultures. OGD mediated toxicity was assessed by PI labeling. OGD significantly increased PI labeling compared to control slices (Co). Cultures deprived only of oxygen (OD) were identical to control cultures. MK-801 reverses PI uptake after OGD (data not shown).