

Oxygen and Glucose Deprivation (OGD) in Primary Rat Hippocampal and Cortical Neurons

Compound testing for the following indications:

- Stroke
- Ischemia
- Alzheimer's Disease
- Neuroprotection

Model:

Primary rat hippocampal and cortical neurons are matured in vitro until DIV 14 and are then deprived for oxygen and glucose in a hypoxia chamber for a defined period of time. Control cells are maintained under normal culture conditions. The effect of test compounds on oxygen and glucose deprived neurons can be assessed for cell viability and apoptosis related endpoints.

OGD - rat hippocampal neurons (DIV14)

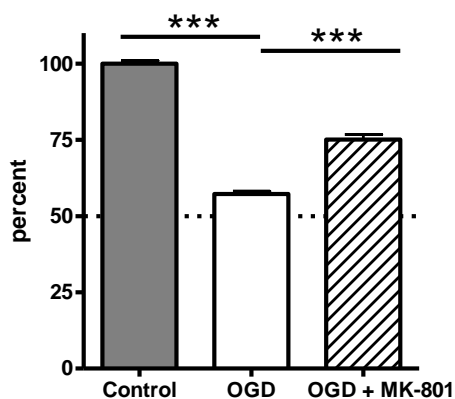


Fig.1. Oxygen and glucose deprivation in primary rat hippocampal neurons at DIV 14. Viability was assessed by the MTT assay. MK-801 significantly improved cell viability in two independent experiments ($p > 0.001$).

OGD - rat cortical neurons (DIV14)

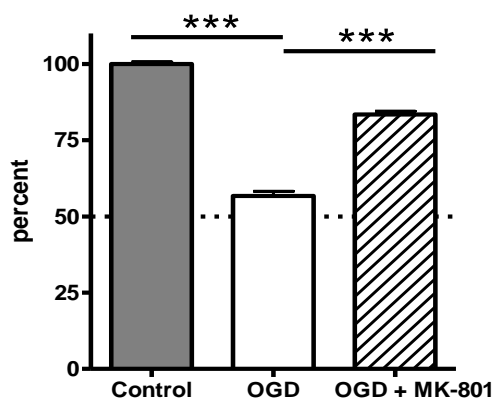


Fig.2. Oxygen and glucose deprivation in primary rat cortical neurons at DIV 14. Viability was assessed by the MTT assay. MK-801 significantly improved cell viability in two independent experiments ($p > 0.001$).