

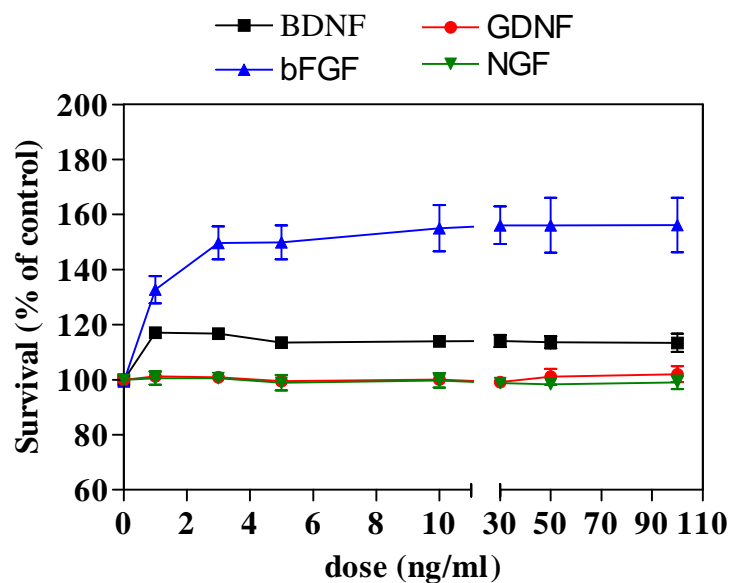
EFFECT OF COMPOUNDS ON BASAL SPINAL MOTOR NEURON SURVIVAL

1. Introduction

Survival assay are widely used in neurobiology to study the neurotrophic effect of a new compound.

2. Compound testing

A primary culture of spinal motor neurons are plating at low density in a defined medium. The compound is added and after 72h the number of surviving neurons is evaluated by an enzymatic assay measuring acid phosphatase activity.



Dose response curve from different neurotrophines on spinal motor neurons survival after 3 days of treatment. BDNF and bFGF are able to promote spinal motor neurons survival whereas GDNF and NGF are not.

3. References

Ueda Y., Walsh E., Nakanishi H. and Yoshida K. A colorimetric assay method for evaluation of neurotrophic activity in vitro. *Neurosci. Letters* (1994) 165:203-207.

Martin A. and Clynes M. Acid phosphatase: endpoint for in vitro toxicity tests. *In Vitro Cell.Dev. Biol.* (1991) 27A:183-184.