

Investigation of the Excitotoxicity Pathways in Neuroblastoma Cells

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Abstract : Glutamate has many neurological functions in the central nervous system and is found at high concentrations in the brain. Increased levels of glutamate in the neuronal space are toxic, causing neuron damage and death. This is called glutamate-induced excitotoxicity. Excitotoxicity is among the causes of many neurological diseases such as trauma, cerebral ischemia, epilepsy, Parkinson's Disease, Alzheimer's Disease. Since neuroblastoma cells are known to be excitotoxic, we propose that excitotoxicity can be studied in neuroblastoma cells. Excitotoxicity can be induced using kainic acid in neuroblastoma cells. Measuring the secretion of glutamate, excitotoxicity can be analyzed in neuroblastoma cells.

Keywords : glutamate, excitotoxicity, kainic acid, Sirt4

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