

中文題目：甘草酸對小腦神經之保護經由阻斷NF- κ B之活化

英文題目：**Glycyrrhizic acid protects glutamate-induced excitotoxicity in cerebellar granule neurons through blockade of NF- κ B activation**

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Background and Purpose: Glycyrrhizic acid (GL) is a herbal drug with a wide spectrum of antiviral activities and pharmacological effects including anti-inflammation. We report here that GL is protective against neurotoxicity elicited by the excitatory amino acid glutamate in rat primary neuronal cultures and hippocampal slices.

Methods and Results: GL confers neuroprotective properties in a concentration-dependent manner, as determined by cell survival, apoptosis, and calcium influx. The site of action of the drug appeared to be downstream of glutamate receptors and to involve specific inhibition of glutamate-mediated induction of nuclear factor kappa B.

Conclusions: A strict correlation between neuroprotective concentrations of GL and blockade of NF- κ B induction was observed. These results may contribute to the emerging theme of anti-inflammatory drugs and neurodegeneration.