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Resveratrol alleviates ethanol-induced neuroinflammation *in vivo* and *in vitro*: Involvement of TLR2-MyD88-NF-κB pathway

Running title: Resveratrol alleviates EtOH-induced neuroinflammation

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Highlights

- Resveratrol prevents deficits in spatial reference memory following ethanol administration.
- Resveratrol reverses EtOH-induced TLR2 activation in microglia.
- Resveratrol mitigated activation of the TLR2/MyD88/NF-κB pathway

Abstract

Excessive ethanol (EtOH) intake affects cognitive function and leads to permanent learning and memory deficits. EtOH-induced neuroinflammation plays an important role in EtOH neurotoxicity. Studies have shown that EtOH activates microglia and induces an inflammatory response. Resveratrol (Rsv) is a natural polyphenol found in a wide variety of plants and fruits, and produces the neuroprotective and anti-