

Accepted Manuscript

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PII: S0300-483X(18)30218-X
DOI: <https://doi.org/10.1016/j.tox.2018.08.002>
Reference: TOX 52075

To appear in: *Toxicology*

Received date: 12-3-2018
Revised date: 12-7-2018
Accepted date: 4-8-2018

Please cite this article as: Guan Q, Su B, Wei X, Wang S, Wang M, Liu N, Jiang W, Xu M, Yu S, Protective effect of calpeptin on acrylamide-induced microtubule injury in sciatic nerve, *Toxicology* (2018), <https://doi.org/10.1016/j.tox.2018.08.002>

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Protective effect of calpeptin on acrylamide-induced microtubule injury in sciatic nerve'

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Highlights

- The models of subchronic acrylamide (ACR) poisoning and calpeptin (CP) intervention have been set up.
- CP has an intervening effect on ACR-induced MT injury in sciatic nerve.
- The mechanism of ACR-induced MT injury is associated with the channel of calpain- PKC/CDK5-MAP2/Tau-MTs.

Abstract

The present study aimed to investigate the protective effect and mechanism of calpeptin (CP) on acrylamide (ACR)-induced microtubule (MT) injury in the sciatic nerve of rats. All rats were divided into four groups (control, CP, ACR, and ACR+CP): 1 ml/kg saline, 200 µg/kg CP, 30 mg/kg ACR, and 30 mg/kg ACR plus 200 µg/kg CP were administered to the corresponding rats for 4 weeks through intraperitoneal injection. Body

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