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Acute intravenous administration of dietary constituent theanine suppresses noxious neuronal transmission of trigeminal spinal nucleus caudalis in rats

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Highlights

- Intravenous theanine injection suppresses nociceptive SpVc WDR neuronal excitability.
- Neuronal firing rates were dose-dependently inhibited by theanine.
- The inhibitory effect of theanine lasted for 5-10 min and was reversible.
- Theanine inhibited the iontophoretic glutamate-induced neuronal firing.
- Theanine may be an effective treatment option for trigeminal pain without side-effects.

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