

## Galanin (rat, mouse) (trifluoroacetate salt)

## Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Keep away from moisture

Storage:

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.

## Biological Description

Description	Galanin is a neuropeptide with diverse biological activities. [1][2][3][4][5] It binds to rat galanin (GAL) receptor subtypes GAL1-3 (IC50s = 0.339, 1.35, and 3.31 nM, respectively) and human GAL1-3 (IC50s = 0.288, 1.62, and 12.3 nM, respectively). [1] Galanin binds to and inhibits contraction of guinea pig gastric smooth muscle cells induced by carbachol. [2]
In vivo	In vivo, Galanin (6 nmol, i.c.v.) increases feeding behavior in rats and increases latency to hindpaw withdrawal in response to heat and mechanical stimulation in a rat model of carrageenin-induced inflammation when administered at a dose of 2 nmol injected into the nucleus accumbens.[3][4] Galanin (5 µg, i.c.v.) also inhibits acetylcholine release induced by scopolamine in the ventral hippocampus of freely moving rats. [5]

## Solubility Information

Solubility	H2O: 1 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Reference

- Branchek, T.A., Smith, K.E., Gerald, C., et al. Galanin receptor subtypes. Trends Pharmacol. Sci. 21(3), 109-117 (2000).
- Gu, Z.F., Pradhan, T.K., Coy, D.H., et al. Interaction of galanin fragments with galanin receptors on isolated smooth muscle cells from guinea pig stomach: Identification of a novel galanin receptor subtype. J. Pharmacol. Exp. Ther. 272(1), 371-378 (1995).
- Crawley, J.N., Austin, M.C., Fiske, S.M., et al. Activity of centrally administered galanin fragments on stimulation of feeding behavior and on galanin receptor binding in the rat hypothalamus. J. Neurosci. 10(11), 3695-3700 (1990).
- Yang, Y., Zhang, Y., Li, X.H., et al. Involvements of galanin and its receptors in antinociception in nucleus accumbens of rats with inflammatory pain. Neurosci. Res. 97, 20-25 (2015).
- Taber, M.T., and Crawley, J.N. Galanin attenuates the effects of scopolamine but not exposure to a novel environment on acetylcholine release in the rat ventral hippocampus. Psychobiol. 27(1), 57-62 (1999).

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