Data Sheet (Cat.No.T37718)

TargetMol

Galanin (rat, mouse) (trifluoroacetate salt)

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: Keep away from moisture
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)

Reference

Branchek, T.A., Smith, K.E., Gerald, C., et al. Galanin receptor subtypes. Trends Pharamacol. 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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