

PRODUCT INFORMATION



Galanin (rat, mouse) (trifluoroacetate salt)

Item No. 24456

Formal Name:	glycyl-L-tryptophyl-L-threonyl-L-leucyl-L-asparaginyl-L-seryl-L-alanylglycyl-L-tyrosyl-L-leucyl-L-leucylglycyl-L-prolyl-L-histidyl-L-alanyl-L-isoleucyl-L- α -aspartyl-L-asparaginyl-L-histidyl-L-arginyl-L-seryl-L-phenylalanyl-L-seryl-L- α -aspartyl-L-lysyl-L-histidylglycyl-L-leucyl-L-threoninamide, 2,2,2-trifluoroacetate	H—Gly—Trp—Thr—Leu—Asn—Ser—Ala—Gly—Tyr—Leu— Leu—Gly—Pro—His—Ala—Ile—Asp—Asn—His—Arg— Ser—Phe—Ser—Asp—Lys—His—Gly—Leu—Thr—NH ₂
Synonyms:	GAL (rat, mouse), Galanin (1-29) (rat, mouse)	
MF:	C ₁₄₁ H ₂₁₁ N ₄₃ O ₄₁ • XCF ₃ COOH	• XCF ₃ COOH
FW:	3,164.5	
Purity:	≥95%	
Supplied as:	A lyophilized powder	
Storage:	-20°C	
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Galanin (rat, mouse) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the galanin (rat, mouse) (trifluoroacetate salt) in water. The solubility of galanin (rat, mouse) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Galanin is a neuropeptide with diverse biological activities.¹⁻⁵ It inhibits forskolin-induced cAMP production in cells expressing GAL1 or GAL3 receptors (EC₅₀s = 31.6 and 91 nM, respectively) and stimulates inositol phosphate accumulation in cells expressing GAL₂ receptors (EC₅₀ = 173.3 nM).¹ Galanin binds to and inhibits contraction of guinea pig gastric smooth muscle cells induced by carbachol (Item No. 14486; IC₅₀s = 7.9 and 4 nM, respectively).² *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 μ g, i.c.v.) also inhibits acetylcholine (Item No. 23829) release induced by scopolamine in the ventral hippocampus of freely moving rats.⁵

References

1. Webling, K., Groves-Chapman, J.L., Runesson, J., et al. *Neuropeptides* **58**, 83-92 (2016).
2. Gu, Z.F., Pradhan, T.K., Coy, D.H., et al. *J. Pharmacol. Exp. Ther.* **272**(1), 371-378 (1995).
3. Crawley, J.N., Austin, M.C., Fiske, S.M., et al. *J. Neurosci.* **10**(11), 3695-3700 (1990).
4. Yang, Y., Zhang, Y., Li, X.H., et al. *J. Neurosci. Res.* **97**, 20-25 (2015).
5. Taber, M.T. and Crawley, J.N. *Psychobiol.* **27**(1), 57-62 (1999).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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