

PRODUCT INFORMATION



Galanin (human) (acetate)

Item No. 33139

Formal Name: glycyl-L-tryptophyl-L-threonyl-L-leucyl-L-asparaginyll-L-seryl-L-alanylglycyl-L-tyrosyl-L-leucyl-L-leucylglycyl-L-prolyl-L-histidyl-L-alanyl-L-valylglycyl-L-asparaginyll-L-histidyl-L-arginyl-L-seryl-L-phenylalanyl-L-seryl-L- α -aspartyl-L-lysyl-L-asparaginyllglycyl-L-leucyl-L-threonyl-L-serine, acetate

Synonyms: GAL (human), Galanin (1-30)

MF: $C_{139}H_{210}N_{42}O_{43} \cdot XC_2H_4O_2$

FW: 3,157.4

Purity: $\geq 98\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years

H—Gly—Trp—Thr—Leu—Asn—Ser—Ala—Gly—Tyr—Leu—

Leu—Gly—Pro—His—Ala—Val—Gly—Asn—His—Arg—

Ser—Phe—Ser—Asp—Lys—Asn—Gly—Leu—Thr—OH

• $XC_2H_4O_2$

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

Laboratory Procedures

Galanin (human) (acetate) is supplied as a solid. A stock solution may be made by dissolving the galanin (human) (acetate) in water. The solubility of galanin (human) (acetate) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Human galanin is a 30-amino acid neuropeptide and galanin (GAL) receptor agonist.¹⁻⁴ It inhibits forskolin-induced cAMP production in HEK293E cells expressing recombinant human GAL₁ receptors ($EC_{50} = 0.031$ nM) and stimulates inositol phosphate accumulation in CHO cells expressing recombinant human GAL₂ receptors ($EC_{50} = 12.3$ nM).^{1,2} Human galanin induces contractions in isolated rat longitudinal fundus strips with an EC_{50} value of 13.8 nM.³ Intrathecal administration of human galanin (3, 10, and 30 nmol/animal) reduces paw licking and flinching in the second, but not first, phase of the formalin test in rats.⁴

References

1. Fitzgerald, L.W., Patterson, J.P., Conklin, D.S., *et al.* Pharmacological and biochemical characterization of a recombinant human galanin GALR1 receptor: Agonist character of chimeric galanin peptides. *J. Pharmacol. Exp. Ther.* **287**(2), 448-456 (1998).
2. Borowsky, B., Walker, M.W., Huang, L.Y., *et al.* Cloning and characterization of the human galanin GALR2 receptor. *Peptides* **19**(10), 1771-1781 (1998).
3. Schmidt, W.E., Kratzin, H., Eckart, K., *et al.* Isolation and primary structure of pituitary human galanin, a 30-residue nonamidated neuropeptide. *Proc. Natl. Acad. Sci. USA* **88**(24), 11435-11439 (1991).
4. Hua, X.-Y., Hayes, C.S., Hofer, A., *et al.* Galanin acts at GalR1 receptors in spinal antinociception: Synergy with morphine and AP-5. *J. Pharmacol. Exp. Ther.* **308**(2), 574-582 (2004).

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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Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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