

PRODUCT INFORMATION



Orexin B amide (mouse, rat) (trifluoroacetate salt)

Item No. 35128

Formal Name: L-arginyl-L-prolylglycyl-L-prolyl-L-prolylglycyl-L-leucyl-L-glutaminylglycyl-L-arginyl-L-leucyl-L-glutaminy-L-arginyl-L-leucyl-L-leucyl-L-glutaminy-L-alanyl-L-asparaginyglycyl-L-asparaginy-L-histidyl-L-alanyl-L-alanylglycyl-L-isoleucyl-L-leucyl-L-threonyl-L-methioninamide, trifluoroacetate salt

Synonyms: Hypocretin 2, OXB, RPPGPPGLQGRLQRLQANGNHAAGILTM-NH₂

MF: C₁₂₆H₂₁₅N₄₅O₃₄S • XCF₃COOH

FW: 2,936.4

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

H-Arg-Pro-Gly-Pro-Pro-Gly-Leu-Gln-Gly-Arg-Leu-Gln-Arg-Leu-Leu-Gln-Ala-Asn-Gly-Asn-His-Ala-Ala-Gly-Ile-Leu-Thr-Met-NH₂ • XCF₃COOH

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

Laboratory Procedures

Orexin B amide (mouse, rat) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Orexin B amide (mouse, rat) (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

Orexin B is a hypothalamic neuropeptide that regulates feeding behavior, wakefulness, and behavior under situations of high motivational relevance.¹ The sequence of mouse orexin B is identical to the rat sequence and differs from the human sequence at only two residues.² Orexin B is an agonist of orexin receptors (OXRs) that increases intracellular calcium mobilization in HEK293 cells expressing OX1R or OX2R (EC₅₀s = 0.93 and 0.13 μM, respectively).³

References

1. Mahler, S.V., Moorman, D.E., Smith, R.J., *et al.* Motivational activation: A unifying hypothesis of orexin/hypocretin function. *Nat. Neurosci.* **17(10)**, 1298-1303 (2014).
2. Sakurai, T., Amemiya, A., Ishii, M., *et al.* Orexins and orexin receptors: A family of hypothalamic neuropeptides and G protein-coupled receptors that regulate feeding behavior. *Cell* **92(4)**, 573-585 (1998).
3. Lang, M., Söll, R.M., Dürrenberger, F., *et al.* Structure-activity studies of orexin A and orexin B at the human orexin 1 and orexin 2 receptors led to orexin 2 receptor selective and orexin 1 receptor preferring ligands. *J. Med. Chem.* **47(5)**, 1153-1160 (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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