Orexin A amide (bovine, human, mouse, rat) (trifluoroacetate salt)

**CAS Registry No.:** 205640-90-0


**Peptide Sequence:** XPLPDCCRKTSCRLELLHGAGNHAAGILTL-NH₂ (Modifications: X = Glp, Disulfide bridge between 6-12, 7-14, Leu-33 = C-terminal amide)

**MF:** C₁₅₂H₂₄₃N₄₇O₄₄S₄ • XCF₃COOH

**Synonyms:** Hypocretin 1, Orexin A

**FW:** 3,561.1

**Purity:** ≥95%

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years

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

**Laboratory Procedures**

Orexin A amide (bovine, human, mouse, rat) (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the orexin A amide (bovine, human, mouse, rat) (trifluoroacetate salt) in the solvent of choice. Orexin A amide (bovine, human, mouse, rat) (trifluoroacetate salt) is soluble in organic solvents such as DMSO, which should be purged with an inert gas. The solubility of orexin A amide (bovine, human, mouse, rat) (trifluoroacetate salt) in these solvents is approximately 3 mg/ml.

Orexin A amide (bovine, human, mouse, rat) (trifluoroacetate salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, orexin A amide (bovine, human, mouse, rat) (trifluoroacetate salt) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Orexin A amide (bovine, human, mouse, rat) (trifluoroacetate salt) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

**Description**

Orexin A is a 33 amino acid hypothalamic neuropeptide with a role in appetite regulation, wakefulness, locomotor activity, hypothalamic-pituitary-adrenal activity, and pain thresholds. Orexin signaling is activated by nutrient depletion, causing an increase in food intake by delaying the signals of satiety. It activates the orexin-1 and -2 receptors with equal affinity (EC₅₀ = 0.09 and 0.06 μM, respectively).

**References**