PRODUCT INFORMATION

Orexin A (bovine, human, mouse, rat)
Item No. 15073

CAS Registry No.: 205640-90-0
Peptide Sequence: XPLPDCCRQKTCSRLLYELLHGAG

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

Synonym: Hypocretin 1, Orexin A
FW: 3,561.1
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

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

Orexin A (bovine, human, mouse, rat) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Orexin A (bovine, human, mouse, rat) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Orexin A (bovine, human, mouse, rat) 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