



LKT Laboratories, Inc.

Orexin B, human

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Product Information

Product ID 07116

CAS No.

Chemical Name Hypocretin-2

Synonym

Formula $C_{123}H_{212}N_{44}O_{35}S$

Formula Wt. 2899.4

Melting Point

Purity $\geq 95\%$

Solubility Soluble in water (1 mg/mL).

Arg-Ser-Gly-Pro-Pro-Gly-Leu-Gln-Gly-Arg-Leu-Gln-Arg-Leu-Leu-Gln-Ala-Ser-Gly-Asn-His-Ala-Ala-Gly-Ile-Leu-Thr-Met-NH₂

Bulk quantities available upon request

Product ID	Size
07116	1 mg

Store Temp -20° C

Ship Temp Ambient

Description Orexin B is an endogenous peptide neurotransmitter that activates orexin-2 receptors (OX2), controlling pituitary functions and increasing secretion of luteinizing hormone (LH) and follicle-stimulating hormone (FSH). Orexin B is also involved in sleep, arousal, and feeding behaviors. This compound exhibits neuroprotective and orexigenic activities. Orexin B increases phosphorylation of Akt, increasing neuronal viability and protecting neurons against oxidative stress. Orexin B also decreases latency to eating, increases feeding behavior, decreases anxiety, and increases arousal in vivo. Orexin B stimulates insulin secretion in the pancreas of rats in a β -adrenergic receptor-dependent manner.

References Cataldi NI, Lux Lantos VA, Libertun C. Orexin A and B in vitro modify orexins receptors expression and gonadotropins secretion of anterior pituitary cells of proestrous rats. *Regul Pept.* 2014 Jan 10;188:25-30. PMID: 24333629.

Sokolowska P, Urbańska A, Biegańska K, et al. Orexins protect neuronal cell cultures against hypoxic stress: an involvement of Akt signaling. *J Mol Neurosci.* 2014 Jan;52(1):48-55. PMID: 24243084.

Tsuji T, Yamamoto T, Tanaka S, et al. Analyses of the facilitatory effect of orexin on eating and masticatory muscle activity in rats. *J Neurophysiol.* 2011 Dec;106(6):3129-35. PMID: 21940607.

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Caution: This product is intended for laboratory and research use only. It is not for human or drug use.