

## Rabbit antibody to Orexin A (14-33): whole serum

<b>Catalogue No.:</b>	R-104-100
<b>Description:</b>	<b>FUNCTION:</b> Neuropeptides that play a significant role in the regulation of food intake and sleep-wakefulness, possibly by coordinating the complex behavioral and physiologic responses of these complementary homeostatic functions. A broader role in the homeostatic regulation of energy metabolism, autonomic function, hormonal balance and the regulation of body fluids, is also suggested. Orexin-A binds to both OX1R and OX2R with a high affinity, whereas orexin-B binds only to OX2R with a similar high affinity. <b>SUBCELLULAR LOCATION:</b> Endoplasmic reticulum; rough endoplasmic reticulum. Associated with perikaryal rough endoplasmic reticulum as well as cytoplasmic large granular vesicles at synapses. <b>SIMILARITY:</b> Belongs to the orexin family.
<b>Batch No.:</b>	See product label
<b>Unit size:</b>	100 uL
<b>Antigen:</b>	A synthetic peptide (CRLYELLHGAGNHAAGILTL) as part of Bovine Orexin A (aa: 14-33) conjugated to KLH has been used as the immunogen.
<b>Antigen Location:</b>	14-33 aa
<b>Other Names:</b>	Orexin-A; Hypocretin-1; Hcrt1
<b>Accession:</b>	OREX_BOVIN
<b>Produced in:</b>	Rabbit
<b>Purity:</b>	Whole serum
<b>Applications:</b>	IHC. This is a superb antiserum for immunohistochemistry on Orexin A containing neurons exhibiting intense labelling of neurons with very low back ground. A dilution of 1:1000 to 1:2000 is recommended for this application. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
<b>Specificity:</b>	The specificity for this antiserum has been confirmed by immunohistochemistry on rat brain and the results reflect the current literature.
<b>Cross-reactivity:</b>	This antibody is known to react with rat Orexin A.
<b>Form:</b>	Lyophilised
<b>Reconstitution:</b>	Reconstitute in 100 uL of sterile water. Centrifuge to remove any insoluble material.
<b>Storage:</b>	Store lyophilized antibody at 2-8C. After reconstitution keep aliquots at -20C for a higher stability, and at 2-8C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
<b>Expiry Date:</b>	12 months after purchase
<b>Specific References:</b>	<ol style="list-style-type: none"><li>1. Kruger J.L. et al (2010) Cellular location and major terminal networks of the orexinergic system in the brains of five microchiropteran species. J Chem Neuroanat. 2010 Nov;40(3):256-62.</li><li>2. Gaykema R.P. et al (2009) Lipopolysaccharide challenge-induced suppression of Fos in hypothalamic orexin neurons: their potential role in sickness behavior.</li></ol>

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FOR RESEARCH USE ONLY

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Brain Behav Immun. 2009 Oct;23(7):926-30.

3. Lee H.S. et al (2005) Retrograde study of hypocretin-1 (orexin-A) projections to subdivisions of the dorsal raphe nucleus in the rat.

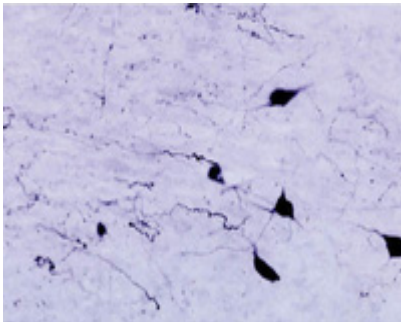
Brain Res. 2005 Oct 12;1059(1):35-45.

4. Yao S.T. et al (2005) Water deprivation increases the expression of neuronal nitric oxide synthase (nNOS) but not orexin-A in the lateral hypothalamic area of the rat.

J Comp Neurol. 2005 Sep 19;490(2):180-93.

### References:

Nambu, T. et al. (1999) Brain Research. 827: 243-60



Immunohistochemical staining of orexin A in rat zona incerta neurons using Rabbit antibody to Orexin A (14-33): whole serum, catalogue number R-104-100, at a dilution of 1 in 1000.

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