



## Rabbit Anti-Orexin B antibody

SL11303R

<b>Product Name:</b>	Orexin B
<b>Chinese Name:</b>	增食欲素B/欲激素B抗体
<b>Alias:</b>	HCRT; Hcrt2; Orexin 2; Orexin-2; hypocretin (orexin) neuropeptide precursor; Hypocretin 2; hypocretin; NRCLP1; Orexin; Orexin precursor; OX; PPOX; prepro orexin; OREX_HUMAN; PPORX.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Dog,Pig,Cow,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	3kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Orexin B:51-130/130
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	The hypothalamus acts as a major regulatory center involved in the control of feeding behavior and energy homeostasis. Several neuropeptides and proteins have been shown to be involved in the regulation of these processes. Orexin A (hypocretin 1) a 33 amino acid peptide and orexin B(hypocretin 2), a 28 amino acid peptide, are both derived from a common 130 amino acid precursor, prepro-orexin, which is encoded by a gene

localized to human chromosome 17q21. Orexin A and Orexin B stimulate food consumption when administered intracerebroventricularly to rats. Orexin gene expression in the brain is highly restricted to distinct populations of neurons located in specific hypothalamic regions, including the lateral hypothalamic area (LHA), a region implicated in feeding behavior.

**Function:**

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.

**Subcellular Location:**

Associated with perikaryal rough endoplasmic reticulum as well as cytoplasmic large granular vesicles at synapses.

**Post-translational modifications:**

Specific enzymatic cleavages at paired basic residues yield the different active peptides.

**DISEASE:**

Defects in HCRT are the cause of narcolepsy type 1 (NRCLP1) [MIM:161400]. Narcolepsy is a neurological disabling sleep disorder, characterized by excessive daytime sleepiness, sleep fragmentation, symptoms of abnormal rapid-eye-movement (REM) sleep, such as cataplexy, hypnagogic hallucinations, and sleep paralysis. Cataplexy is a sudden loss of muscle tone triggered by emotions, which is the most valuable clinical feature used to diagnose narcolepsy. Human narcolepsy is primarily a sporadically occurring disorder but familial clustering has been observed. Note=Human narcolepsy is associated with a deficient orexin system. Orexins are absent and/or greatly diminished in the brain and cerebrospinal fluid (CSF) of most narcoleptic patients.

**Similarity:**

Belongs to the orexin family.

**SWISS:**

O43612

**Gene ID:**

3060

**Database links:**

[Entrez Gene: 3060](#)Human

[Omim: 602358](#)Human

[SwissProt: O43612](#)Human

[Unigene: 158348](#)Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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