SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-Orexin Prepro antibody

Catalog Number: SL11520R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Orexin Prepro
Immunogen:	KLH conjugated synthetic peptide derived from human Orexin Prepro: 70-97/131
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 ICC/IF=1:100-500 IF=1:100-500 ELISA=1:5000-10000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	(predicted: Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Sheep)
Predicted MW.:	3kDa
Subcellular Location:	cytoplasmic
Background:	Prepro-orexin is 130 amino acid long peptide with a putative 33 AA secretory sequence, a hydrophobic core followed by residues with small polar side chains. The expression was detected in brain and to a small extent in testis. These neuropeptides bind and activate two closely related Orexin receptors—G-protein coupled receptors (GPCRs) OX1R and OX2R. Orexins (Orexin A and Orexin B) are a family of hypothalamic neuropeptides selectively expressed in the hypothalamus. Orexin A and Orexin B are derived from the same precursor (Prepro-orexin) by proteolytic cleavage. **Function:** Prepro-orexin is 130 amino acid long peptide with a putative 33 AA

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	secretory sequence, a hydrophobic core followed by residues with small polar side chains. The expression was detected in brain and to a small extent in testis. These neuropeptides bind and activate two closely related Orexin receptors—G-protein coupled receptors (GPCRs) OX1R and OX2R. Orexins (Orexin A and Orexin B) are a family of hypothalamic neuropeptides selectively expressed in the hypothalamus. Orexin A and Orexin B are derived from the same precursor (Prepro-orexin) by proteolytic cleavage. **Subcellular Location:** Cytoplasmic and Endoplasmic reticulum **Tissue Specificity:** Abundantly expressed in subthalamic nucleus but undetectable in other brain regions tested (hypothalamus was not tested) and in heart, placenta, lung, liver, skeletal muscle, kidney and pancreas. **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. **Database links:** **Entrez Gene:** 3060 Human Omim: 602358 Human **SwissProt:** O43612 Human **Unigene:** 158348 Human

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