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# Rabbit Anti-Orexin Prepro antibody

SL11520R

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| **Product Name:** | Orexin Prepro |
| **Chinese Name:** | 食欲素前体蛋白OX抗体 |
| **Alias:** | HCRT; Hypocretin; OX; PPORX; PPOX; Prepro orexin; OREX_HUMAN; Orexin; Hcrt; Hypocretin-1; Hcrt1; Orexin-B; Hypocretin-2; Hcrt2. |
| **Organism Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **React Species:** | Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,Sheep, |
| **Applications:** | 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）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Molecular weight:** | 3kDa |
| **Cellular localization:** | cytoplasmic |
| **Form:** | Lyophilized or Liquid |
| **Concentration:** | 1mg/ml |
| **immunogen:** | KLH conjugated synthetic peptide derived from human Orexin Prepro:70-97/131 |
| **Lsotype:** | IgG |
| **Purification:** | affinity purified by Protein A |
| **Storage Buffer:** | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| **Storage:** | 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. |
| **PubMed:** | PubMed |
| **Product Detail:** | 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 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.

**SWISS:**
O43612

**Gene ID:**
3060

**Database links:**

Entrez Gene: 3060Human

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| | Omim: 602358Human<br><br>SwissProt: O43612Human<br><br>Unigene: 158348Human<br><br>**Important Note:**<br>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |