

**HCRT / Orexin Antibody**  
**Sheep Polyclonal Antibody**  
**Catalog # ALS11216****Specification**

---

**HCRT / Orexin Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">O43612</a>
Reactivity	Human
Host	Sheep
Clonality	Polyclonal
Calculated MW	13kDa KDa

**HCRT / Orexin Antibody - Additional Information****Gene ID** 3060**Other Names**

Orexin, Hypocretin, Hcrt, Orexin-A, Hypocretin-1, Hcrt1, Orexin-B, Hypocretin-2, Hcrt2, HCRT, OX, PPORX, PPOX

**Target/Specificity**

Specific for human orexin A.

**Reconstitution & Storage**

+4°C or -20°C, Avoid repeated freezing and thawing.

**Precautions**

HCRT / Orexin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**HCRT / Orexin Antibody - Protein Information****Name** HCRT ([HGNC:4847](#))**Synonyms** OX, PPORX, PPOX**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.

**Cellular Location**

Rough endoplasmic reticulum {ECO:0000250|UniProtKB:O55232}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:O55232}. Synapse {ECO:0000250|UniProtKB:O55232} Note=Associated with perikaryal rough endoplasmic reticulum as well as cytoplasmic large granular vesicles at

synapses {ECO:0000250|UniProtKB:O55232}

#### **Tissue Location**

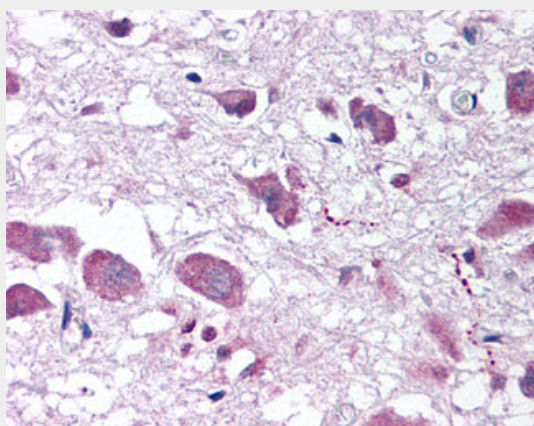
Abundantly expressed in subthalamic nucleus but undetectable in other brain regions tested (hypothalamus was not tested) and in heart, placenta, lung, liver, skeletal muscle, kidney and pancreas.

#### **HCRT / Orexin Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **HCRT / Orexin Antibody - Images**



Anti-HCRT / Orexin antibody IHC of human brain, hypothalamus.

#### **HCRT / Orexin Antibody - Background**

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.

#### **HCRT / Orexin Antibody - References**

Sakurai T., et al. Cell 92:573-585(1998).  
Sakurai T., et al. J. Biol. Chem. 274:17771-17776(1999).  
Lee J.-H., et al. Eur. J. Biochem. 266:831-839(1999).  
Hungs M., et al. Bioessays 23:397-408(2001).  
Willie J.T., et al. Annu. Rev. Neurosci. 24:429-458(2001).

