

Product Specification Sheet

**OREXIN-B (Hypocretin-B) Antibodies**

<b>Cat. OXB11-S</b>	Rabbit Anti-Mouse Orexin-B antiserum	<b>SIZE:</b> 100 ul
<b>Cat. OXB11-A</b>	Rabbit Anti-Mouse Orexin-B, IgG (aff pure)	<b>SIZE:</b> 100 ug
<b>Cat. OXB11-P</b>	Mouse Orexin-B Control peptide	<b>SIZE:</b> 100 ug

Several peptides associated with feeding behavior have been reported recently. Orexins (**Orexin-A** and **Orexin-B**) are a family of hypothalamic neuropeptides selectively expressed in the hypothalamus (1-2). Orexin-A and Orexin-B are derived from the same precursor (Prepro-orexin) by proteolytic cleavage. **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 (1-2). These neuropeptides bind and activate two closely related **Orexin receptors**--G-protein coupled receptors (GPCRs) **OX1R** and **OX2R**.

experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at: [www.4adi.com/data/abblock.html](http://www.4adi.com/data/abblock.html)).

**General References:** (1) Sakurai, T. et al. (1998) *Cell*, **92**, 573-585; DeLecca L et al (1998) *PNAS* **95**, 322-327

**(2) Citations of ADI's Antibodies** (see web site for updated list)

Jain, M R, 2000, *Regulatory Peptides*, **87**, 19-24  
 Caillol M, 2003, *Brain Res.* **960**, 48-61  
 Kirchgessner, KM, 1999, *Neuron* **24**: 941-951  
 Krowicki ZK, 2002, *Am J Physiol Cell Physiol* **283**, G465  
 Ciriello J, 2003, *Brain Research*, **967**, 28, 123-131

**Source of Antigen and Antibodies**

<b>Antigen</b>	13-aa peptide of mouse Orexin-B (1-13 aa; RPG PPG LQG RLQ R) (1) (gene accession #055241) ; <b>Designated (OXB11-P or control peptide)</b> conjugated to KLH
<b>Location</b>	~N-terminal
<b>Ab Host/type</b>	Rabbit, Polyclonal antiserum (#OXB11-S) and IgG, purified over antigen-agarose (Cat # OXB11-A) supplied in PBS+0.1% BSA+0.05% azide
<b>2-Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>-ve control</b>	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Form & Storage of Antibodies/Peptide Control**

**Antiserum (unpurified, undiluted)**

100 ul/vial solution	50 ul/vial lyophilized powder
contains 0.05% sodium azide	
<b>Reconstitute powder</b> 50 ul or 100 ul PBS	

**Affinity pure IgG**

100 ug/100ul solution	50 ug/50 ul lyophilized powder
Provided in <b>buffer:</b> PBS+0.1% BSA+0.05% azide	
<b>Reconstitute powder</b> in PBS at 1mg/ml	

**Control/blocking peptide**

100 ug/100 ul solution	50 ug/50 ul lyophilized powder
Provided in <b>buffer:</b> PBS pH 7.5, 0.05% sodium azide	
<b>Reconstitute powder</b> in PBS at 1 mg/ml.	

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder.

\*This product is for *in vitro* research use only.

Full-length mouse/rat Orexin-B (Cat # OXB12-P) and human Orexin-B (Cat # OXB14-P) is also available.

**Recommended Usage**

**Western Blotting** (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure using Chemiluminescence technique).

**ELISA** (1:10K-1:100K; using 50-100 ng of control peptide/well).

**Histochemistry & Immunofluorescence:** We recommend the use of affinity purified antibody at 2-20 ug/ml (see refs 2).

**Specificity & Cross-reactivity**

Mouse OXB11-P control peptide sequence is 100% homologous in mouse, pig, bovine, dog, rat and 92 % human Orexin-B. Anti-mouse Orexin-B reacts with the full-length mouse, rat, and human Orexin-B. The OXB11 epitope is not found in Orexin-A. Since Orexins-A and Orexin-B are derived from an unprocessed pre-pro orexins (130 aa), the anti-Orexin-B antibodies may also react with pre-pro orexins. Antibody crossreactivity in various species is not established. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking

Oxb11-S-A-P 60902A