



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rabbit Anti-Human Orexin B Antibody

Catalog No: 130-00015	Isotype: Rabbit IgG	Species: Human	Accession No: O43612
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Description

Orexin, also called **hypocretin**, is a neurotransmitter that regulates arousal, wakefulness, and appetite. The most common form of narcolepsy, in which the sufferer briefly loses muscle tone (cataplexy), is caused by a lack of orexin in the brain due to destruction of the cells that produce it. The brain contains very few cells that produce orexin: in a human brain, about 10,000 to 20,000 neurons in the hypothalamus. However, the axons from these neurons extend throughout the entire brain and spinal cord, where there are also receptors for orexin.

Applications

Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1 : 64,000
Western Blotting			*	
Enzyme Immunoassay (EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Preparation

The immunogen was a synthetic peptide (Orexin B). This antibody was produced from a rabbit immunized with this peptide conjugated with KLH. The IgG fraction was purified from rabbit serum by Protein G affinity chromatography.

Specificity

This antibody can specifically bind to human Orexin B. The cross reactivity with mouse and rat Orexin B was not tested.

Reconstitution

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1 x PBS to a final concentration of 1 mg/ml.

Storage

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can also be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for at least 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 30 days at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

Reference

1. Sakurai, T.; et al. (1998). "Orexins and orexin receptors: a family of hypothalamic neuropeptides and G protein-coupled receptors that regulate feeding behavior". *Cell* **92** (4): 573–85.
2. de Lecea, L.; et al. (1998). "The hypocretins: Hypothalamus-specific peptides with neuroexcitatory activity". *Proc. Natl. Acad. Sci. U.S.A.* **95** (1): 322–7.

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