Description: This antiserum was raised in a rabbit by immunization with porcine thyroglobulin (pTG) conjugate of synthetic orexin A (bovine, dog, human, mouse, porcine, rat) peptide. The product vial contains 50 μ L of the titled antiserum obtained by lyophilizing its 0.001 M phosphate buffer (pH 7.0, 0.5 mL) solution. It can be used for immunoassay, immunohistochemistry or any other immunoreactions with orexin A (bovine, dog, human, mouse, porcine, rat).

Immunogen: Synthetic Orexin A-pTG conjugate

Host: Rabbit

Amino Acid Sequence of Orexin A (bovine¹⁾, dog²⁾, human³⁾, mouse^{1) 4)}, porcine⁵⁾, rat^{1) 4)}):

Pyr-PLPDCCRQK TCSCRLYELL HGAGNHAAGI LTL-NH₂

Product Form: Lyophilized unpurified serum

Size: 50 μL

Reconstitution: Reconstitute the product with 0.5 mL of 0.01M PBS (pH 7.0) to make a 10 fold diluted stock solution. If it is stored in a refrigerator, add moderate antiseptic to the solution (e.g. NaN₃ 0.1%).

Storage: The product will be stable for over one year if it be stored at -20° C to -80° C until opened. Upon reconstitution, the antiserum solution must be stored at 2° C to 8° C and used within one month. Repeated freezing-thawing should be avoided.

Suggested Working Dilution Range: 1:8,000 for enzyme immunoassay (EIA); 1:10,000 for immunohistochemistry. Optimal dilution should be determined by each laboratory for each application.

Specificity (based on EIA): Orexin A (bovine, dog, human, mouse, porcine, rat) 100% Orexin B (mouse, rat)0%

Positive Control (Immunohistochemistry): Hypothalamus

Species Tested (Immunohistochemistry): Mouse

Related Peptide: Orexin B (mouse, rat)

RPGPPGLQGR LQRLLQANGN HAAGILTM-NH2

Related Antiserum: Anti Orexin B (mouse, rat) Serum Y451

REFERENCES:

- 1. T. Sakurai, A. Amemiya et al., Orexins and orexin receptors: a family of hypothalamic neuropeptides and G protein-coupled receptors that regulate feeding behavior. *Cell*, **92**: 573-585, 1998
- 2. M. Hungs, J. Fan et al., Identification and functional analysis of mutations in the hypocretin (orexin) genes of narcoleptic canines. *Genome Res.*, 11: 531-539, 2001
- 3. T. Sakurai, T. Moriguchi et al., Structure and function of human prepro-orexin gene. J. Biol. Chem., 274: 17771-17776, 1999
- 4. L. Lecea, TS. Kilduff et al., The hypocretins: hypothalamus-specific peptides with neuroexcitatory activity. *Proc. Natl. Acad. Sci. U.S.A.*, **95**: 322-327, 1998
- 5. CJ. Dyer, KJ. Touchette et al., Cloning of porcine prepro-orexin cDNA and effects of an intramuscular injection of synthetic porcine orexin-B on feed intake in young pigs. *Domest. Anim. Endocrinol.*, **16**: 145-148, 1999

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