**BACKGROUND**

The hypothalamus is essential for maintaining homeostasis by integrating the vertebrate endocrine and nervous systems, thereby controlling temperature, thirst and hunger. Orexin-A and Orexin-B (also designated hypocretins) are hypothalamic neuropeptides that are derived from a single precursor, prepro-orexin, by proteolytic processing. These peptides bind to and activate two closely related, G protein-coupled receptors, designated Orexin receptor-1 and Orexin receptor-2. Orexin-A protein and prepro-orexin mRNA are localized to neurons within the lateral section of the hypothalamus, designated the "feeding center". Prepro-orexin mRNA is up-regulated during fasting, suggesting that orexins may play a role in the central feedback mechanism that regulates feeding behavior. Orexin has been shown to increase the release of GABA and glutamate from axons, a response seen as a result of most synaptic activities in the hypothalamic region.

**CHROMOSOMAL LOCATION**

Genetic locus: HCRT (human) mapping to 17q21.2; Hcrt (mouse) mapping to 11 D.

**SOURCE**

Orexin-A (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Orexin-A of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8070 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Orexin-A (C-19) is recommended for detection of Orexin-A processed active peptide of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:10000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:5000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:30000).

Orexin-A (C-19) is also recommended for detection of Orexin-A processed active peptide in additional species, including equine, canine, bovine and porcine.


**STORAGE**

Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**SELECT PRODUCT CITATIONS**


**MONOS Satisfaction Guaranteed**

Try Orexin-A (KK09): sc-80263, our highly recommended monoclonal alternative to Orexin-A (C-19).