

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Orexin R2/HCRTR2. In flow cytometry, stains human Orexin R2/HCRTR2 transfectants but not irrelevant transfectants.
Source	Monoclonal Mouse IgG _{2B} Clone # 456723
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human Orexin R2/HCRTR2 Met1-Trp444 Accession # AAC39602
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

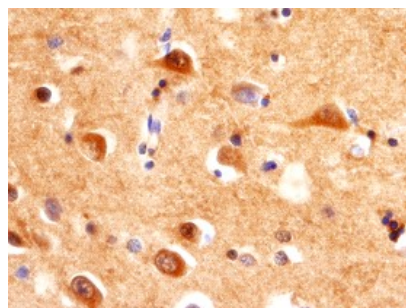
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Immunohistochemistry



Orexin R2/HCRTR2 in Human Brain. Orexin R2/HCRTR2 was detected in immersion fixed paraffin-embedded sections of human brain (hypothalamus) using 25 µg/mL Mouse Anti-Human Orexin R2/HCRTR2 Monoclonal Antibody (Catalog # MAB52461) overnight at 4 °C. Tissue was stained with the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Orexin R2 (Orexin Receptor 2), also known as HCRTR2 (Hypocretin Receptor 2) or OX2R is a 40 kDa 7-transmembrane G-protein-coupled glycoprotein that is a high affinity receptor for orexins A and B (hypocretins 1 and 2). In mouse brain, engagement of Orexin Rs/HCRTRs promotes wakefulness, such that absence of either orexins or their receptors creates a narcolepsy-like state. It also influences reward circuits involving food or addictive drugs. The extracellular portions of human Orexin R2/HCRTR2 share 92% and 93% aa identity with corresponding portions of mouse and rat Orexin R2/HCRTR2, respectively.