

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human HCRTR2. In flow cytometry, stains human HCRTR2 transfectants but not irrelevant transfectants.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 456723
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human HCRTR2 Met1-Trp444 Accession # AAC39602
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

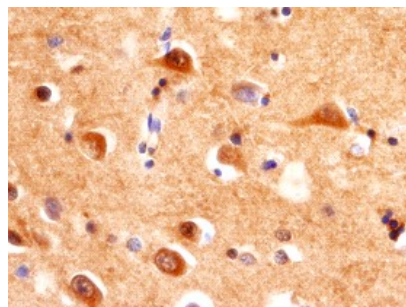
## APPLICATIONS

**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.

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

## DATA

### Immunohistochemistry



**HCRTR2 in Human Brain.** HCRTR2 was detected in immersion fixed paraffin-embedded sections of human brain (hypothalamus) using 25 µg/mL Mouse Anti-Human 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 counter-stained with hematoxylin (blue). [View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.](#)

## PREPARATION AND STORAGE

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

## BACKGROUND

Hypocretin receptor 2 (HCRTR2); also known as orexin 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 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 HCRTR2 share 92% and 93% aa identity with corresponding portions of mouse and rat HCRTR2, respectively.