

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Orexin R2/HCRT2. In flow cytometry, stains human Orexin R2/HCRT2 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 Orexin R2/HCRT2<br>Met1-Trp444<br>Accession # AAC39602                                                                                                                                                                   |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### 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.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

Orexin R2 (Orexin Receptor 2), also known as HCRT2 (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/HCRTs 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/HCRT2 share 92% and 93% aa identity with corresponding portions of mouse and rat Orexin R2/HCRT2, respectively.

#### PRODUCT SPECIFIC NOTICES

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