

#### DESCRIPTION

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| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Mouse/Rat                                                                                                |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human, mouse, and rat GABA <sub>B</sub> R2 in direct ELISAs.                                           |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Rabbit IgG Clone # 2605C                                                                            |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from cell culture supernatant                                                          |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant rat GABA <sub>B</sub> R2<br>Trp41-Ser482<br>Accession # O88871 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                                   |
| *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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | 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

GABBR2 is half of a heterodimeric GPCR for GABA which mediates coupling to G proteins. B-type receptors for the neurotransmitter GABA (gamma-aminobutyric acid) inhibit neuronal activity through G protein-coupled second-messenger systems, which regulate the release of neurotransmitters and the activity of ion channels and adenylyl cyclase. As a homodimer, GABBR2 is retained in the endoplasmic reticulum and endoplasmic reticulum-Golgi intermediate compartment. When GBR1/GBR2 heterodimers are present they are localized to the plasma membrane. GABBR2 is differentially expressed in the nervous system. GABBR2 and GABBR1 mRNA's are coexpressed in various brain regions such as the Purkinje cell layer of the cerebellum. In situ hybridization histochemistry using an antisense probe to this novel receptor indicates GABBR2 is found exclusively in neurons. GABBR2 is implicated in synaptic inhibition, hippocampal long-term potentiation, slow wave sleep, muscle relaxation and nociception.

#### PRODUCT SPECIFIC NOTICES

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