

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse/Rat                                                                                                                                                                                                                                                             |
| <b>Specificity</b>        | Detects human HOMER1 in direct ELISAs.                                                                                                                                                                                                                                      |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 666241                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Synthetic peptide KFGQWADSRA corresponding to aa 73-82 of human HOMER1<br>Accession # Q86YM7                                                                                                                                                                                |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

HOMER1 is an approximately 48 kDa cytoplasmic protein that regulates the cell surface localization of neuronal mGluR1 and mGluR5 metabotropic glutamate receptors. It also functions in striated muscle mechanotransduction and excitation-contraction coupling by regulating the localization of transient receptor potential (TRP) channels and the coupling of ryanodine receptors to Cav1.2 calcium channels. Alternately spliced isoforms of human HOMER1 lack either the C-terminal half of the molecule (aa 178-354) or 130 aa following the WH1 domain (aa 99-228). Particular isoforms show distinct effects on hippocampal neuronal plasticity and the maintenance of extracellular glutamate levels in the prefrontal cortex. Within aa 73-82, human HOMER1 shares 100% aa sequence identity with mouse and rat HOMER1.

#### PRODUCT SPECIFIC NOTICES

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