

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Mouse/Rat                                                                     |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human, mouse and rat GRB2 in Western blots.                                 |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>2B</sub> Clone # 481021                                   |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                          |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human GRB2<br>Met1-Val217<br>Accession # P62993 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 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.

**Western Blot** 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

GRB2 (growth factor receptor-bound protein 2), an adaptor protein involved in signal transduction, contains a central SH2 domain flanked by two SH3 domains. The SH2 domain binds to phosphotyrosine residues in RTKs such as PDGF and EGF, non-RTKs such as Bcr/Abl and FAK, and docking proteins such as FRS-2 and Gab1. The SH3 domains associate with proline rich motifs on the guanine nucleotide releasing factor, Sos, stimulating GTP binding to Ras, which in turn activates MAPK and other signaling pathways. GRB2 also participates in the endocytosis of EGFR through its recruitment of Cbl. Tyrosine phosphorylation of GRB2 SH3 domains reduces binding to Sos and negatively regulates downstream signaling pathways including Ras, JNK and MAPK.

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