

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Amphiphysin/AMPH in direct ELISAs.                                                                                                                                                                                                                            |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 694145                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human Amphiphysin/AMPH<br>Asn204-Gly300<br>Accession # P49418                                                                                                                                                                           |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 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

AMPH (Amphiphysin; also AMPH1) is a member of the Amphiphysin family, BAR superfamily of proteins. Although its calculated MW is only 78 kDa, it runs anomalously in SDS-Page at 125-128 kDa. It is expressed in neurons, Sertoli cells, possibly in anterior pituitary endocrine cells and apparently cardiac muscle. It appears to form heterodimers with AMPH2, and in this configuration, promotes clathrin-associated endocytic vesicle formation. Furthermore, and perhaps related, AMPH also interacts with N-WASP, initiating actin polymerization. Human AMPH is 695 amino acids (aa) in length. It contains an N-terminal BAR domain (aa 24-240) that binds lipids, a central region that binds AP2 (aa 322-340) and clathrin (aa 347-386), and a C-terminal SH3 domain (aa 622-695) that binds proline-rich ligands. There is one known 108 kDa splice variant that shows a deletion of aa 425-466. Over aa 204-300, human AMPH shares 98% aa identity with mouse AMPH.

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