# Mouse EphA2 Alexa Fluor® 350-conjugated Antibody

Monoclonal Rat $IgG_{2B}$ Clone # 233720

Catalog Number: FAB639U

100 µg

## DESCRIPTION

| | |
|---|---|
| **Species Reactivity** | Mouse |
| **Specificity** | Detects mouse EphA2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human EphA1, recombinant mouse (rm) EphA3, 4, 6, 7, 8, recombinant rat EphA5, rmEphB1, 2, 3, 4, or 6 is observed. |
| **Source** | Monoclonal Rat $IgG_{2B}$ Clone # 233720 |
| **Purification** | Protein A or G purified from hybridoma culture supernatant |
| **Immunogen** | Mouse myeloma cell line NS0-derived recombinant mouse EphA2<br>Ala22-Ala535 (predicted)<br>Accession # AAA82113 |
| **Conjugate** | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm |
| **Formulation** | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.<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.*

| | Recommended Concentration | Sample |
|---|---|---|
| **Flow Cytometry** | 0.25-1 µg/$10^6$ cells | D3 mouse embryonic stem cell line and HEK293 human embryonic kidney cell line transfected with mouse EphA2 |

## 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.**<br>• 12 months from date of receipt, 2 to 8 °C as supplied. |

## BACKGROUND

EphA2, also known as Eck, Myk2, and Sek2 (1), is a member of the Eph receptor family which binds members of the ephrin ligand family. There are two classes of receptors, designated A and B. Both the A and B class receptors have an extracellular region consisting of a globular domain, a cysteine-rich domain, and two fibronectin type III domains. This is followed by the transmembrane region and cytoplasmic region. The cytoplasmic region contains a juxtamembrane motif with two tyrosine residues, which are the major autophosphorylation sites, a kinase domain, and a conserved sterile alpha motif (SAM) in the carboxy tail which contains one conserved tyrosine residue. Activation of kinase activity occurs after ligand recognition and binding. EphA2 has been shown to bind ephrin-A3, ephrin-A1, ephrin-A5, ephrin-A4, and ephrin-A2 (2, 3). The extracellular domains of mouse and human EphA2 share greater than 92% amino acid identity. Only membrane-bound or Fc-clustered ligands are capable of activating the receptor *in vitro*. While soluble monomeric ligands bind the receptor, they do not induce receptor autophosphorylation and activation (2). *In vivo*, the ligands and receptors display reciprocal expression (3). It has been found that nearly all receptors and ligands are expressed in developing and adult neural tissue (3). The Eph/ephrin families also appear to play a role in angiogenesis (3).

**References:**


1. Eph Nomenclature Committee [letter] (1997) Cell **90**:403.
2. Flanagan, J.G. and P. Vanderhaegen (1998) Annu. Rev. Neurosci. **21**:309.
3. Pasquale, E.B. (1997) Curr. Opin. Cell. Biol. **9**:608.


## PRODUCT SPECIFIC NOTICES






bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449