Mouse Ephrin-A2 Antibody

Monoclonal Rat IgG_{2A} Clone # 84019

Catalog Number: MAB458

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Ephrin-A2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 2% cross-reactivity with recombinant mouse (rm) Ephrin-A4, recombinant human (rh) Ephrin-A3, rmEphrin-B1, and rhEphrin-B3 is observed.
Source	Monoclonal Rat IgG_{2A} Clone # 84019
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Ephrin-A2 Arg21-Asn184 Accession # P52801
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

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
Western Blot	1 µg/mL	Recombinant Mouse Ephrin-A2 Fc Chimera (Catalog # 603-A2)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Ephrin-A2, also known as ELF-1, Cek7-L and LERK-6 (1), is a member of the Ephrin ligand family which binds members of the Eph receptor family. All ligands share a conserved extracellular sequence, which most likely corresponds to the receptor binding domain. This conserved sequence consists of approximately 125 amino acids (aa) and includes four invariant cysteines. The A-class ligands have a GPI anchor following the conserved sequence. Ephrin-A2 has been shown to bind EphA2, EphA3, EphA4, EphA5, EphA6, EphA7, and EphA8 (2, 3). The extracellular domains of human and mouse Ephrin-A2 share 93% aa 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 **9**: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.

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