

EphA3 Monoclonal Antibody

Catalog No: YM0223

Reactivity: Human

Applications: WB;ELISA

Target: EphA3

Fields: >>Axon guidance

Gene Name: EPHA4

Protein Name: Ephrin type-A receptor 4

P54764

Q03137

Human Gene ld: 2043

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of EphA3 (aa751-983) expressed in E. Coli.

Specificity: EphA3 Monoclonal Antibody detects endogenous levels of EphA3 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

Purification : Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 110kD

Cell Pathway: Axon guidance;

1/2

P References:

1. Nat Genet. 2004 Jan;36(1):40-5.

2. Cell. 2005 Oct 21;123(2):291-304.

Background:

This gene belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2015],

Function:

catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,domain:The protein kinase domain mediates interaction with NGEF/ephexin-1.,function:Receptor for members of the ephrin-A family. Binds to ephrin-A1, -A4 and -A5. Binds more poorly to ephrin-A2 and -A3. May play a role in a signal transduction process involved in hindbrain pattern formation.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. Ephrin receptor subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 SAM (sterile alpha motif) domain.,similarity:Contains 2 fibronectin type-III domains.,subunit:Interacts with the src family kinase, p59-Fyn, through the major phosphorylation site at position Tyr-602. Interacts with NGEF/ephexin-1.,tissue specificity:Ubiquitous.

Subcellular Location :

Cell membrane; Single-pass type I membrane protein. Cell projection, axon. Cell projection, dendrite. Cell junction, synapse, postsynaptic density membrane. Early endosome. Cell junction, adherens junction. Clustered upon activation and targeted to early endosome.

Expression: Ubiquitous.

Western Blot analysis using EphA3 Monoclonal Antibody against truncated Trx-EphA3 recombinant protein (1) and truncated EphA3(aa566-983)-hlgGFc transfected CHO-K1 cell lysate(2).