abcam

ab217799

Anti-Eph receptor A3 antibody

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 48.98% TBS, 1X, 1% BSA
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human EPHA3 aa 400-500 conjugated to Keyhole Limpet Haemocyanin. The exact immunogen used to generate this antibody is proprietary information. Database link P29320
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/20
Notes	-

Target data

See full target information EPHA3

Function	Receptor tyrosine kinase which binds promiscuously membrane-bound ephrin family ligands residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling (PubMed:11870224, PubMed:12794130). Highly promiscuous for ephrin-A ligands it binds preferentially EFNA5 (By similarity). Upon activation by EFNA5 regulates cell-cell adhesion, cytoskeletal organization and cell migration (PubMed:11870224). Also activated by EFNA1, inhibiting epithelial-to-mesenchymal transition of cardiac cells and playing a role in heart development (PubMed:12794130). Involved in the retinotectal mapping of neurons. May also control the segregation but not the guidance of motor and sensory axons during neuromuscular circuit development (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Eph receptor A3 also known as EphA3 is a member of the ephrin receptor subfamily of protein-tyrosine kinases. This receptor with a mass of approximately 120 kDa plays a role in cell-cell communication mainly by interacting with ephrin-A ligands. EphA3 is expressed in various tissues including the nervous system developing tissues and some adult tissues like the lungs and prostate. Its localization varies with the developmental stage and tissue type reflecting its role in numerous processes.
Biological function summary	EphA3 influences cellular organization movement and positioning through its involvement in contact-dependent signaling. It acts as part of a larger receptor-ligand complex which mediates bidirectional signaling between cells. This interaction generally leads to changes in the cytoskeleton impacting cell shape

	and locomotion. EphA3's signaling can regulate developmental processes such as axon guidance angiogenesis and tissue boundary formation.
Pathways	EphA3 modulates various important signaling pathways such as the PI3K/AKT pathway and the Rho family GTPase pathway. It interacts with proteins like Ephrin-A5 and other Eph receptors coordinating complex cellular signaling networks. These interactions contribute to the regulation of cell proliferation survival and migration influencing tissue patterning and organ development.
Associated diseases and disorders	EphA3 has associations with cancer and neurological disorders. It has ties to various cancers like leukemia where it is implicated in proliferation and migration of malignant cells. In the context of neurological conditions EphA3 plays a role in neurodevelopmental disorders. In these diseases connections with other ephrin receptors and proteins involved in cell signaling become critical as they influence pathogenic pathways.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

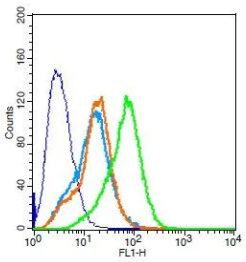
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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1 product image



Flow Cytometry - Anti-Eph receptor A3 antibody (ab217799)

Eph receptor A3 Flow Cytometry staining using rabbit Anti-Eph receptor A3 antibody

Flow cytometric analysis of Human 293T cells labeling Eph receptor A3 with ab217799 at 1/20 dilution for 30 minutes followed by incubation with a FITC conjugated secondary (green) compared to unstained cells (blue), secondary only (light blue) and isotype control (orange).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.