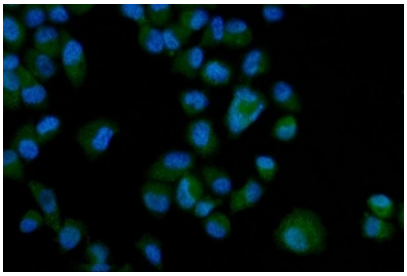
Eph Receptor A3 Antibody / EPHA3 RTK Antibody (RQ6985)

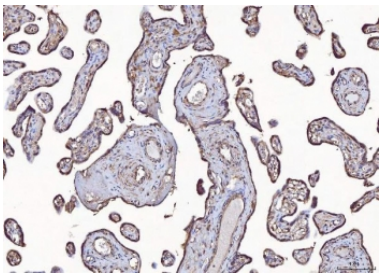
Catalog No.	Formulation	Size
RQ6985	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

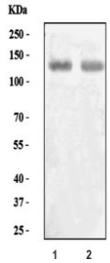
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P29320
RRID	AB_3754748
Applications	Western Blot : 0.5-1 ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Eph Receptor A3 Antibody / EPHA3 RTK Antibody is available for research use only.



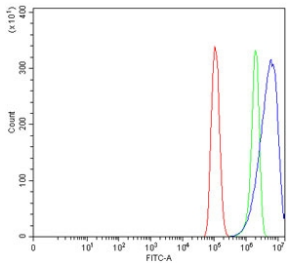
Eph Receptor A3 Antibody Staining of PC-3 Prostate Cancer Cells IF. Immunofluorescence staining of FFPE human PC-3 prostate cancer cells using Eph Receptor A3 Antibody (green) with DAPI nuclear counterstain (blue). Heat-induced epitope retrieval was performed by steaming in pH 6 citrate buffer for 20 min. EPHA3 immunoreactivity is visible predominantly outside the nuclei, with cytoplasmic and peripheral staining across the cell population.



Eph Receptor A3 Antibody Staining of Human Placenta IHC. Immunohistochemistry staining of FFPE human placental tissue using Eph Receptor A3 Antibody. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling. Brown immunoreactivity is evident in placental villous structures, with prominent staining along trophoblast-associated regions surrounding the villi.



Eph Receptor A3 Antibody Detection in MOLT4 Cells and Human Placenta WB. Western blot analysis of human MOLT4 T lymphoblastic leukemia cell lysate (lane 1) and human placental tissue lysate (lane 2) using Eph Receptor A3 Antibody. EPHA3 has predicted molecular weights of approximately 110 kDa and 61 kDa for isoforms 1 and 2, respectively.



Eph Receptor A3 Antibody Detection in PC-3 Prostate Cancer Cells FACS. Flow cytometry analysis of human PC-3 prostate cancer cells using Eph Receptor A3 Antibody at 1 ug/million cells following blocking with goat serum. Antibody-stained cells (blue) show a strong rightward fluorescence shift relative to the isotype control (green) and unstained cells (red), demonstrating EPHA3 detection in PC-3 cells.

Description

Eph Receptor A3 Antibody / EPHA3 RTK Antibody detects EPH receptor A3 (EPHA3), a transmembrane member of the Eph family of receptor tyrosine kinases. EPHA3 belongs to the EphA receptor subgroup and interacts primarily with glycosylphosphatidylinositol-linked ephrin-A ligands. Because Eph receptors and ephrins are positioned on opposing cell surfaces, their interaction provides a mechanism for contact-dependent signaling between neighboring cells that helps regulate cell positioning, adhesion, migration and tissue organization.

EPHA3 contains an extracellular ephrin-binding region, a single transmembrane segment and an intracellular region containing its protein tyrosine kinase domain. Ligand binding promotes receptor clustering and phosphorylation, initiating signaling that can alter cytoskeletal organization, cell adhesion and cellular movement. EphA receptors frequently generate repulsive responses between interacting cells, making EPHA3 signaling particularly relevant to mechanisms that establish and maintain boundaries between cell populations.

During development, EPHA3 contributes to the spatial organization of cells and tissues. Eph/ephrin signaling has important roles in nervous system development, including axon guidance and formation of neuronal connections, as well as cardiovascular and other developmental processes. An EPHA3 RTK Antibody is therefore relevant to research examining how receptor tyrosine kinase signaling translates positional information into changes in cellular behavior and tissue architecture.

EPHA3 is also investigated extensively in cancer biology. Altered expression of this receptor has been reported in multiple malignancies, and EPHA3 signaling can influence tumor-cell adhesion, migration and interactions with the surrounding microenvironment. EPHA3 has consequently attracted interest as both a tumor-associated molecule and a potential therapeutic target, particularly in studies examining aberrant receptor tyrosine kinase signaling and mechanisms underlying tumor progression.

Researchers studying Eph receptors and receptor tyrosine kinase signaling can explore additional targets on our Signal

Transduction Antibodies page. NSJ Bioreagents provides antibodies for investigating receptors and intracellular pathways involved in cellular communication and signal transduction. An Eph Receptor A3 Antibody provides a research tool for detecting EPHA3 and investigating its roles in developmental signaling, tissue organization, neural biology and cancer research.

Researchers studying Eph receptors and receptor tyrosine kinase signaling can explore additional targets on our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the Eph Receptor A3 Antibody / EPHA3 RTK Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids D59-A514) was used as the immunogen for the Eph receptor A3 antibody.

Storage

After reconstitution, the Eph receptor A3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

EPHA3 antibody, EphA3 antibody, Eph receptor A3 antibody, Ephrin type-A receptor 3 antibody, Tyrosine-protein kinase receptor ETK1 antibody, HEK antibody

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