10320 Camino Santa Fe, Suite G
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EphA3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7608a

Specification

EphA3 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P29320
Other Accession	P29319
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**110131**
Antigen Region	**115-144**

EphA3 Antibody (N-term) - Additional Information

Gene ID 2042

Other Names
Ephrin type-A receptor 3, EPH-like kinase 4, EK4, hEK4, HEK, Human embryo kinase, Tyrosine-protein kinase TYRO4, Tyrosine-protein kinase receptor ETK1, Eph-like tyrosine kinase 1, EPHA3, ETK, ETK1, HEK, TYRO4

Target/Specificity
This EphA3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 115-144 amino acids from the N-terminal region of human EphA3.

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
EphA3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EphA3 Antibody (N-term) - Protein Information

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Name EPHA3

Synonyms ETK, ETK1, HEK, TYRO4

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. Highly promiscuous for ephrin-A ligands it binds preferentially EFNA5. Upon activation by EFNA5 regulates cell-cell adhesion, cytoskeletal organization and cell migration. Plays a role in cardiac cells migration and differentiation and regulates the formation of the atrioventricular canal and septum during development probably through activation by EFNA1. 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.

Cellular Location
[Isoform 1]: Cell membrane; Single-pass type I membrane protein

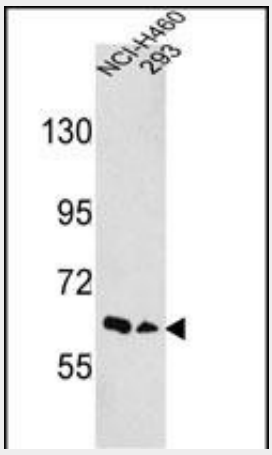
Tissue Location
Widely expressed. Highest level in placenta.

EphA3 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

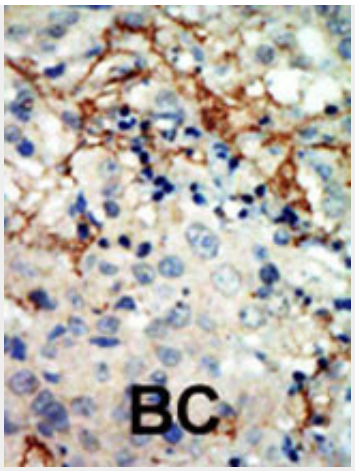
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EphA3 Antibody (N-term) - Images



Western blot analysis of hEPHA3-D130 (Cat. #AP7608a) in NCI-H460,293 cell line lysates (35ug/lane). EPHA3 (arrow) was detected using the purified Pab.

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Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

EphA3 Antibody (N-term) - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

EphA3 Antibody (N-term) - References

Chiari, R., et al., Cancer Res. 60(17):4855-4863 (2000). Wicks, I.P., et al., Proc. Natl. Acad. Sci. U.S.A. 89(5):1611-1615 (1992). Boyd, A.W., et al., J. Biol. Chem. 267(5):3262-3267 (1992).