10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EphB6 Antibody (C-term H990)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7627b

Product Information

Application	WB, IHC-P, E
Primary Accession	O15197
Reactivity	Human, Rat
Predicted	Mouse, Bovine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	110700
Antigen Region	990-1021

Additional Information

Gene ID	2051
Other Names	Ephrin type-B receptor 6, HEP, Tyrosine-protein kinase-defective receptor EPH-6, EPHB6
Target/Specificity	This EphB6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 990-1021 amino acids from the C-terminal region of human EphB6.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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	EphB6 Antibody (C-term H990) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EPHB6
Function	Kinase-defective receptor for members of the ephrin-B family. Binds to ephrin-B1 and ephrin-B2. Modulates cell adhesion and migration by exerting both positive and negative effects upon stimulation with ephrin-B2. Inhibits JNK activation, T-cell receptor-induced IL-2 secretion and CD25 expression

upon stimulation with ephrin-B2 (PubMed:12517763, PubMed:15955811). Can recruit SH2 domain-containing signaling adapters following phosphorylation by EPHB4 (PubMed:34431498).

Cellular Location Cell membrane; Single-pass type I membrane protein

Tissue Location Expressed in brain. Expressed in non invasive breast carcinoma cell lines (at protein level). Strong expression in brain and pancreas, and weak expression in other tissues, such as heart, placenta, lung, liver, skeletal muscle and kidney. Expressed in breast non invasive tumors but not in metastatic lesions. Isoform 3 is expressed in cell lines of glioblastomas, anaplastic astrocytomas, gliosarcomas and astrocytomas. Isoform 3 is not detected in normal tissues.

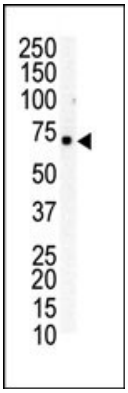
Background

Ephrin receptors and their ligands, the ephrins, mediate numerous developmental processes, particularly in the nervous system. Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. The Eph family of 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. Ephrin receptors make up the largest subgroup of the receptor tyrosine kinase (RTK) family. EphB6 lacks the kinase activity of most receptor tyrosine kinases and binds to ephrin-B ligands.

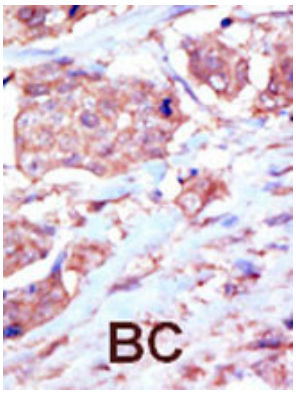
References

Freywald, A., et al., J. Biol. Chem. 278(12):10150-10156 (2003). Luo, H., et al., J. Clin. Invest. 110(8):1141-1150 (2002). Wilkinson, D.G., Nat Rev Neurosci 2(3):155-164 (2001). Luo, H., et al., J. Immunol. 167(3):1362-1370 (2001). Tang, X.X., et al., Proc. Natl. Acad. Sci. U.S.A. 97(20):10936-10941 (2000).

Images



Western blot analysis of anti-EphB6 C-term Pab (Cat. #AP7627b) in Jurkat cell lysate. EphB6 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



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

Citations

- Eph/ephrin profiling in human breast cancer reveals significant associations between expression level and clinical outcome.
- The EPHB6 receptor tyrosine kinase is a metastasis suppressor that is frequently silenced by promoter DNA hypermethylation in non-small cell lung cancer.
- Expression of EphB6 in ovarian serous carcinoma is associated with grade, TNM stage and survival.

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