

EphB6 Antibody (N-term S45)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7627a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O15197
Other Accession	P0C0K7 , O08644
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1663
Calculated MW	110700
Antigen Region	45-74

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 45-74 amino acids from the N-terminal region of human EphB6.
Dilution	WB~~1:500 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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 (N-term S45) 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.

Cellular Location

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.

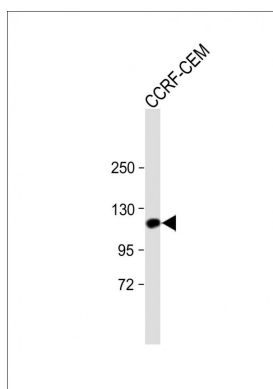
Background

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

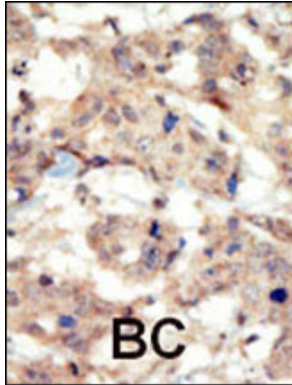
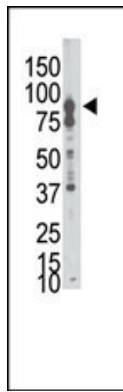
- Freywald, A., et al., J. Biol. Chem. 278(12):10150-10156 (2003).
Luo, H., et al., J. Clin. Invest. 110(8):1141-1150 (2002).
Wilkinson, D.G., Nat Rev Neurosci 2(3):155-164 (2001).
Luo, H., et al., J. Immunol. 167(3):1362-1370 (2001).
Tang, X.X., et al., Proc. Natl. Acad. Sci. U.S.A. 97(20):10936-10941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

Images

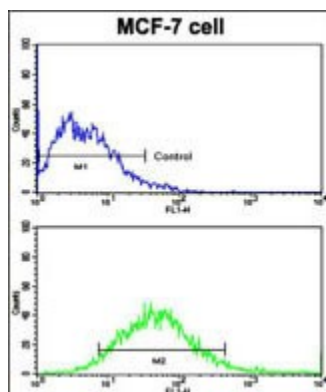


All lanes : Anti-EphB6 Antibody (N-term S45) at 1:500 dilution Lane 1: CCRF-CEM whole cell lysate
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 118kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of anti-EphB6 N-term Pab (Cat. #AP7627a) in A549 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.



Flow cytometric analysis of MCF-7 cells using EphB6 Antibody (N-term S45) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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