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EphB6 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1051a

Product Information

Application	WB, IHC, E
Primary Accession	O15197
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8E7H12
Isotype	IgG1
Calculated MW	110700
Description	EPH receptor B6 (EphB6), with 1006-amino acid protein(~ 110 kDa), belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. Eph receptors and ephrin ligands are membrane-bound cell-cell communication molecules with well-defined functions in development. EphB6 is expressed both in a variety of embryonic and adult tissues. EphB6 is a unique member in the Eph family of receptor tyrosine kinases in that its kinase domain contains several alterations in conserved amino acids and is catalytically inactive. EphB6 can both positively and negatively regulate cell adhesion and migration and tyrosine phosphorylation of the receptor by an Src family kinase acts as the molecular switch for the functional transition.
Immunogen	Purified recombinant fragment of EphB6 expressed in E. Coli.
Formulation	Purified antibody in PBS containing 0.03% sodium azide.

Additional Information

Gene ID	2051
Other Names	Ephrin type-B receptor 6, HEP, Tyrosine-protein kinase-defective receptor EPH-6, EPHB6
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EphB6 Antibody 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.

References

1. Kazushige Ogawa, Hiroki Wada, Noriyoshi Okada J Cell Sci. 2006 Feb 1;119(Pt 3):559-70. 2. Hiroshi Matsuoka, Hiroya Obama, Meghan L. Kelly J Biol Chem. 2005 Aug 12;280(32):29355-63.

Images

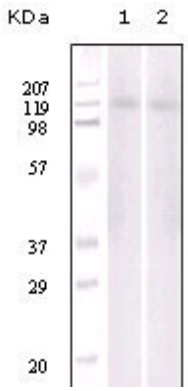


Figure 1: Western blot analysis of Jurkat (1) and NIH/3T3 (2) cell lysate using EphB6 mouse mAb.

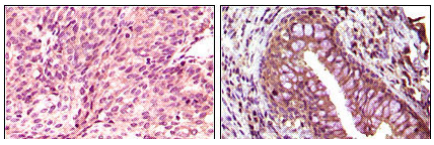


Figure 2: Immunohistochemical analysis of paraffin-embedded human bladder carcinoma (left) and return carcinoma (right) tissue, showing cytoplasmic localization using EphB6 mouse mAb with DAB staining.

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