

Rabbit Anti-EPHB4 antibody

SL6046R

Product Name	EPHB4
Chinese Name	酪氨酸蛋白激酶受体 B4 抗体
Alias	Eph receptor B4; EPHB4_HUMAN; Ephrin type-B receptor 4; Hepatoma Transmembrane Kinase; HTK; MYK1; TYRO11; Tyrosine-protein kinase receptor HTK; Tyrosine-protein kinase TYRO11.
Research Area	Cardiovascular Cell biology Neurobiology Signal transduction Stem cells The cell membrane 受体
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,GuineaPig) WB=1:500-2000 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	107kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Eph receptor B4: 601-700/987
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	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. The protein encoded by this gene binds to ephrin-B2 and plays an essential role in vascular development. [provided by RefSeq, Jul 2008]

Function:

Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B 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. Together with its cognate ligand/functional ligand EFNB2 plays a central role in heart morphogenesis and angiogenesis through regulation of cell adhesion and cell migration. EPHB4-mediated forward signaling controls cellular repulsion and segregation from EFNB2-expressing cells. Plays also a role in postnatal blood vessel remodeling, morphogenesis and permeability and is thus important in the context of tumor angiogenesis.

Subunit:

Heterotetramer upon binding of the ligand. The heterotetramer is composed of an ephrin dimer and a receptor dimer. Oligomerization is probably required to induce biological responses.

Subcellular Location:

Cell membrane; Single-pass type I membrane protein.

Tissue Specificity:

Abundantly expressed in placenta and in a range of primary tissues and malignant cell lines. Expressed in fetal, but not adult, brain, and in primitive and myeloid, but not lymphoid, hematopoietic cells.

Post-translational modifications:

Phosphorylated; autophosphorylation is stimulated by EFNB2.

Similarity:

Belongs to the protein kinase superfamily. Tyr protein kinase family. Ephrin receptor subfamily.

Contains 2 fibronectin type-III domains.

Contains 1 protein kinase domain.
Contains 1 SAM (sterile alpha motif) domain.

SWISS:
P54760

Gene ID:
2050

Database links:

[Entrez Gene: 2050](#) Human

[Entrez Gene: 13846](#) Mouse

[Omid: 600011](#) Human

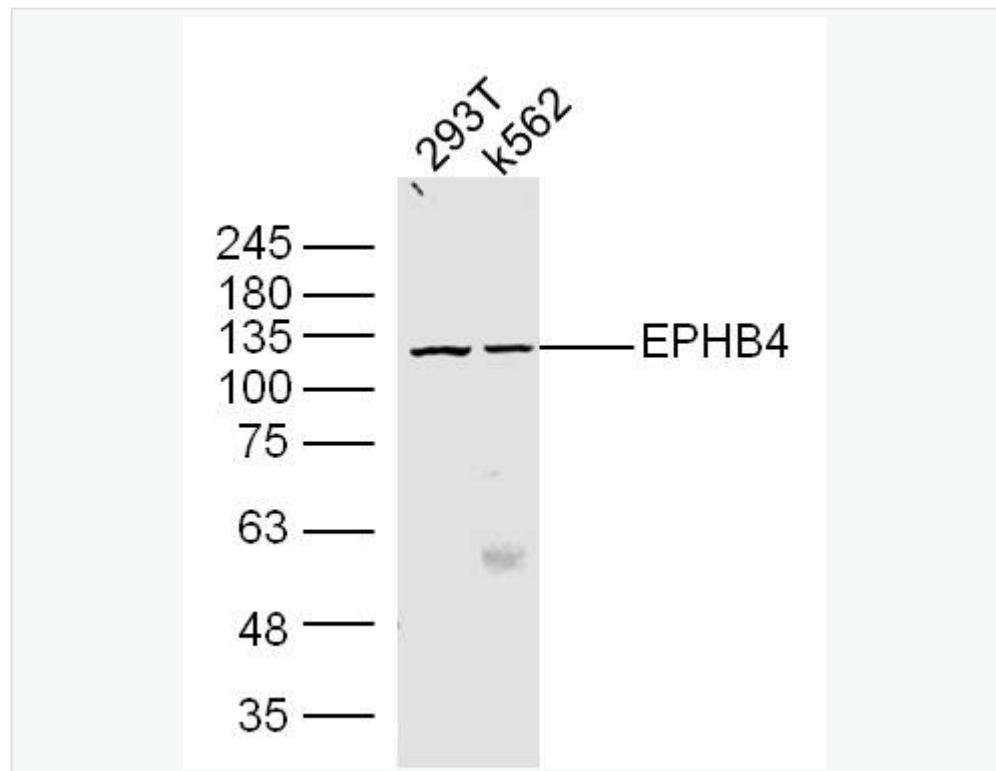
[SwissProt: P54760](#) Human

[SwissProt: P54761](#) Mouse

[Unigene: 437008](#) Human

[Unigene: 34533](#) Mouse

Product Picture





Sample:

293T Cell (Human) Lysate at 40 ug

K562 Cell (Human) Lysate at 40 ug

Primary: Anti-EPHB4 (SL6046R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 107 kD

Observed band size: 120 kD