

Recombinant Anti-EPHB3 Rabbit mAb

Catalog # AP95348

Product Information

Application	WB, FC, IP, IF/IC
Primary Accession	P54753
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	110330

Additional Information

Gene ID	2049
Other Names	ETK2; HEK2; TYRO6; Ephrin type-B receptor 3; EPH-like tyrosine kinase 2; EPH-like kinase 2; Embryonic kinase 2; EK2; hEK2; Tyrosine-protein kinase TYRO6
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human EPHB3 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) FC~~1:10~50 IP~~N/A IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

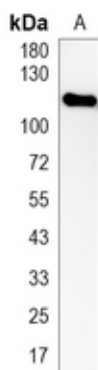
Protein Information

Name	EPHB3
Synonyms	ETK2, HEK2, TYRO6
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. Generally has an overlapping and redundant function with EPHB2. Like EPHB2, functions in axon guidance during development regulating for instance the neurons forming the corpus callosum and the anterior commissure, 2 major interhemispheric connections between the temporal lobes of the cerebral cortex. In addition to its role in axon guidance also plays an important redundant role with other ephrin-B receptors in development and maturation of dendritic spines and the formation of excitatory synapses. Controls other aspects of development through

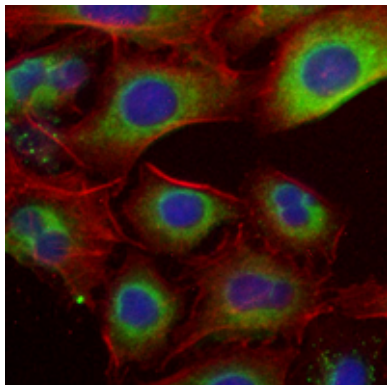
regulation of cell migration and positioning. This includes angiogenesis, palate development and thymic epithelium development for instance. Forward and reverse signaling through the EFNB2/EPHB3 complex also regulate migration and adhesion of cells that tubularize the urethra and septate the cloaca. Finally, plays an important role in intestinal epithelium differentiation segregating progenitor from differentiated cells in the crypt.

Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell projection, dendrite
Tissue Location	Ubiquitous.

Images



Western blot analysis of EPHB3 expression in MOLT4 (A) whole cell lysates. (Predicted band size: 110 kD; Observed band size: 120 kD)



Immunofluorescent analysis of EPHB3 staining in MOLT4 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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