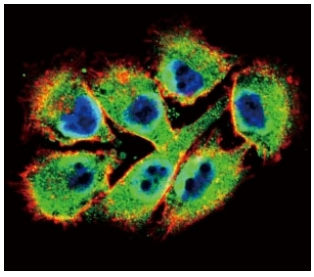
Eph Receptor B2 Antibody / EPHB2 RTK Antibody (F50586)

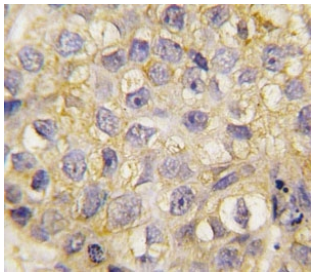
Catalog No.	Formulation	Size
F50586-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50586-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

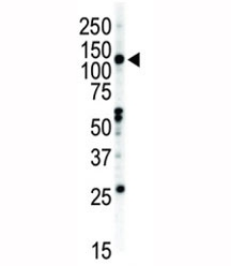
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P29323
Applications	Western blot: 1:1000 IHC (Paraffin): 1:10-1:50 Immunofluorescence: 1:10-1:50
Limitations	This Eph Receptor B2 Antibody / EPHB2 RTK Antibody is available for research use only.



Eph Receptor B2 Antibody Staining of A375 Melanoma Cells IF. Immunofluorescence staining of human A375 melanoma cells using Eph Receptor B2 Antibody with Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments were labeled with Alexa Fluor 555 phalloidin (red), and nuclei were counterstained with DAPI (blue). EPHB2 immunoreactivity is visible throughout the cells, with prominent cytoplasmic and peripheral green staining.



Eph Receptor B2 Antibody Staining of Human Breast Carcinoma IHC. Immunohistochemistry analysis of FFPE human breast carcinoma tissue using Eph Receptor B2 Antibody. Positive staining is visible in the carcinoma cells, with predominantly cytoplasmic and membranous immunoreactivity and hematoxylin-counterstained nuclei.



Eph Receptor B2 Antibody Detection in NCI-H460 Lung Cancer Cells WB. Western blot analysis of human NCI-H460 lung carcinoma cell lysate using Eph Receptor B2 Antibody. A distinct immunoreactive band is detected between the 100 and 150 kDa molecular weight markers, consistent with the expected approximately 117 kDa size of EPHB2.

Description

Eph Receptor B2 Antibody / EPHB2 RTK Antibody detects EPH receptor B2 (EPHB2), a transmembrane member of the Eph family of receptor tyrosine kinases. Eph receptors interact with membrane-associated ephrin ligands to mediate contact-dependent communication between neighboring cells. EPHB2 belongs to the EphB subgroup and preferentially interacts with ephrin-B ligands, helping regulate cell positioning, adhesion, migration and tissue organization.

EPHB2 contains an extracellular ligand-binding region, a transmembrane segment and an intracellular protein tyrosine kinase domain. Ephrin engagement promotes receptor clustering and phosphorylation, initiating signals that influence cytoskeletal organization and cellular movement. The Eph/ephrin system can also signal bidirectionally, with forward signaling through EPHB2 and reverse signaling through the interacting ephrin-B ligand.

EPHB2 has important functions during development, particularly in the nervous system, where Eph/ephrin signaling contributes to axon guidance, neuronal positioning and synaptic organization. It also participates in epithelial tissue organization and the establishment of boundaries between cell populations. These functions make an EPHB2 RTK Antibody relevant to research into developmental signaling, neural biology and mechanisms that coordinate cellular position and behavior.

Altered EPHB2 expression and signaling are also investigated in cancer. Disruption of normal Eph/ephrin signaling can affect cell adhesion, migration, tissue architecture and interactions between tumor cells and their surrounding environment. Depending on biological context, EPHB2 has been associated with different effects on tumor development and progression, making the receptor relevant to studies of cancer-associated signaling and cellular organization.

For additional reagents targeting this ephrin-binding receptor tyrosine kinase, see our EPHB2 Antibody / Ephrin B Receptor Tyrosine Kinase Antibody page. NSJ Bioreagents provides antibodies targeting Eph receptors and related signaling proteins. An Eph Receptor B2 Antibody provides a research tool for investigating EPHB2 RTK expression and its roles in developmental signaling, tissue organization, neural biology and cancer research.

For additional reagents targeting this ephrin-binding receptor tyrosine kinase, see our EPHB2 Antibody / Ephrin B Receptor Tyrosine Kinase Antibody page.

Application Notes

Titration of the Eph Receptor B2 Antibody / EPHB2 RTK Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 1021-1050 from the human protein was used as the immunogen for this Eph Receptor B2 Antibody.

Storage

Aliquot the Eph Receptor B2 Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

EPHB2 antibody, EphB2 antibody, Ephrin type-B receptor 2 antibody, Tyrosine-protein kinase receptor EPH-3 antibody, HEK5 antibody, ERK antibody

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