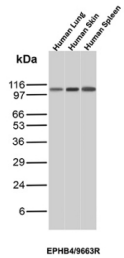
EPH Receptor B4 Antibody for WB / EPHB4 Western Blot Antibody [clone EPHB4/9663R] (V5561)

Catalog No.	Formulation	Size
V5561-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5561-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5561SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

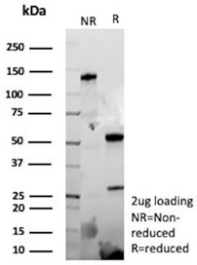
Recombinant RABBIT MONOCLONAL

Bulk quote request

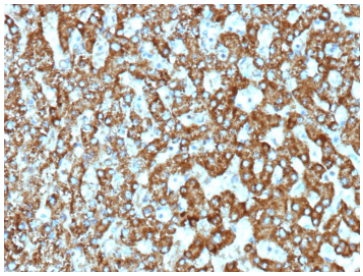
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	EPHB4/9663R
Purity	Protein A/G affinity
UniProt	P54760
Localization	Membrane
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This EPH Receptor B4 Antibody for WB / EPHB4 Western Blot Antibody is available for research use only.



EPH Receptor B4 Antibody for WB Human Tissue. Western blot analysis of human lung, human skin, and human spleen tissue lysates using EPH Receptor B4 Antibody (clone EPHB4/9663R) detects a band at approximately 100-110 kDa, consistent with the predicted molecular weight of Eph receptor B4 / EPHB4, supporting reliable detection across multiple human tissue types.



SDS-PAGE analysis of purified, BSA-free recombinant EPH Receptor B4 antibody (clone EPHB4/9663R) as confirmation of integrity and purity.



EPH Receptor B4 Antibody Liver IHC. Immunohistochemistry staining of FFPE human liver tissue with EPH Receptor B4 antibody (clone EPHB4/9663R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Eph receptor B4 (EPHB4) is a transmembrane receptor tyrosine kinase encoded by the EPHB4 gene and expressed in endothelial and epithelial cells, where it regulates cell signaling, vascular development, and tissue organization. EPH Receptor B4 Antibody for WB / EPHB4 Western Blot Antibody (clone EPHB4/9663R) is designed to detect this protein in denatured samples, supporting analysis of EPHB4 expression by western blot. EPH Receptor B4 antibody, also referred to as Ephrin receptor B4 antibody and EPHB4 antibody in the literature, recognizes a key signaling receptor involved in vascular and tumor-associated pathways.

Functionally, EPHB4 plays a central role in bidirectional signaling through interaction with its ligand ephrin-B2, regulating cell adhesion, migration, and boundary formation. Activation of EPHB4 initiates intracellular phosphorylation cascades that influence cytoskeletal organization and cellular positioning. This signaling axis is critical for vascular development, particularly in establishing venous endothelial identity, and continues to influence cell behavior in adult tissues and disease states.

In western blot applications, EPHB4 is typically detected as a high molecular weight protein consistent with its receptor tyrosine kinase structure. Expression can be observed across multiple tissue types, including lung, skin, and spleen, reflecting its involvement in both vascular and epithelial compartments. The ability to detect EPHB4 across different human tissues supports its study in diverse biological contexts, including development, immune regulation, and cancer biology.

Structurally, EPHB4 contains an extracellular ligand-binding domain, a single transmembrane region, and an intracellular tyrosine kinase domain responsible for signal transduction. Upon ligand binding, receptor dimerization and autophosphorylation occur, leading to activation of downstream signaling pathways. These pathways regulate cell morphology, migration, and interaction with the extracellular environment. EPHB4 may also co-localize with other receptor tyrosine kinases and signaling molecules, contributing to complex regulatory networks.

Altered EPHB4 expression is associated with a range of pathological conditions, including cancer and vascular disorders. In oncology, EPHB4 signaling has been linked to tumor progression, angiogenesis, and metastatic behavior. In vascular biology, it plays an essential role in maintaining vessel structure and function. These roles make EPHB4 an important target for studies of signaling pathways and disease mechanisms.

Supported by clear detection across multiple human tissue lysates, this antibody provides reliable identification of EPHB4 in western blot assays. The recombinant rabbit monoclonal format enables consistent recognition of the target protein in denatured samples. An EPH Receptor B4 antibody for WB is suitable for detecting this receptor tyrosine kinase in studies

of protein expression, signaling pathways, and disease-related changes in EPHB4 levels.

For broad detection of EPHB4 as a receptor tyrosine kinase, see our EPHB4 antibody.

Application Notes

Optimal dilution of the EPH Receptor B4 Antibody for WB / EPHB4 Western Blot Antibody should be determined by the researcher.

Immunogen

A recombinant fragment (within amino acids 1-200) of human EPHB4 protein was used as the immunogen for the recombinant EPH Receptor B4 antibody.

Storage

Aliquot the EPH Receptor B4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

EPHB4 antibody, Eph receptor B4 antibody, Ephrin receptor B4 antibody, EPHB4 WB antibody, EphB4 western blot antibody

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