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PRODUCT DATASHEET

Anti-EphA4 (C-terminal region) Antibody

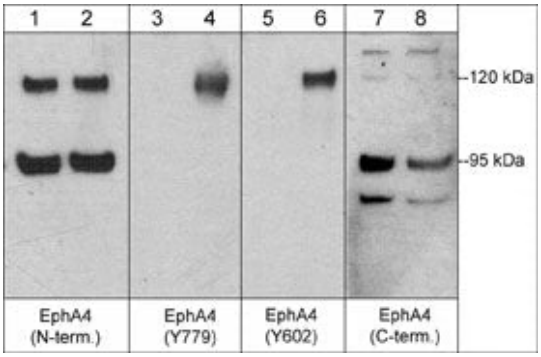
phosphosolutions ANTIBODIES THAT WORK

Product Details

Available Variants	100 µL (SKU:EP2711)
Conjugate	Unconjugated
Isotype	IgG
Gene Name	EPHA4
Host Species	Rabbit
Format	Antigen Affinity Purified
Physical State	Liquid
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Applications	ELISA, WB
Dilution Ranges	WB: 1:1000
Species Reactivity	Human, Mouse, Rat
Immunogen	EphA4 synthetic peptide (coupled to carrier protein) corresponds to amino acids in the C-terminal region of human EphA4. This sequence has significant homology to the conserved site in rat and mouse EphA4, and has low homology to other EphA and EphB family members.
Specificity	The antibody detects 95 and 120 kDa* bands corresponding to EphA4 in Western blots of HUVEC cells and mouse brain tissue.
Molecular Weight	95/120
Quality Control	Western blots performed on each lot.
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
UniProt ID	P54764 UniProt Summary: Receptor tyrosine kinase which binds membrane-bound

	ephrin 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. Highly promiscuous, it has the unique property among Eph receptors to bind and to be physiologically activated by both GPI-anchored ephrin-A and transmembrane ephrin-B ligands including EFNA1 and EFNB3. Upon activation by ephrin ligands, modulates cell morphology and integrin-dependent cell adhesion through regulation of the Rac, Rap and Rho GTPases activity. Plays an important role in the development of the nervous system controlling different steps of axonal guidance including the establishment of the corticospinal projections. May also control the segregation of motor and sensory axons during neuromuscular circuit development. In addition to its role in axonal guidance plays a role in synaptic plasticity. Activated by EFNA1 phosphorylates CDK5 at 'Tyr-15' which in turn phosphorylates NGEF regulating RHOA and dendritic spine morphogenesis. In the nervous system, also plays a role in repair after injury preventing axonal regeneration and in angiogenesis playing a role in central nervous system vascular formation. Additionally, its promiscuity makes it available to participate in a variety of cell-cell signaling regulating for instance the development of the thymic epithelium. During development of the cochlear organ of Corti, regulates pillar cell separation by forming a ternary complex with ADAM10 and CADH1 which facilitates the cleavage of CADH1 by ADAM10 and disruption of adherens junctions. Phosphorylates CAPRIN1, promoting CAPRIN1-dependent formation of a membraneless compartment.
Country of Origin	United States
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
NCBI Gene ID	2043

Product Images



Western blot analysis of human umbilical vein endothelial cells untreated (lanes 1, 3, 5, & 7) or treated with pervanadate (1 mM) for 30 min. (lanes 2, 4, 6, & 8). The blot was probed with anti-EphA4 (N-terminal region) (lanes 1 & 2), anti-EphA4 (Tyr-779) (lanes 3 & 4), anti-EphA4 (Tyr-602) (lanes 5 & 6), or anti-EphA4 (C-terminal region) (lanes 7 & 8).