

Rabbit EphA4 Polyclonal Antibody | anti-EphA4 antibody

EphA4 (Tyr-602)[conserved site], phospho-specific Antibody

CATALOG # AAA71630	HOST Rabbit	REACTIVITY Human, Rat, Mouse, Chicken	APPLICATIONS Immunohistochemistry, ELISA, Western Blot
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PRODUCT SYNONYMS

EphA4; Polyclonal Antibody; EphA4 (Tyr-602)[conserved site]; phospho-specific Antibody; EphA4 (Tyr-602))[conserved site]; phospho-specific; EphA4 602; anti-EphA4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat, Mouse, Chicken
Clonality	Polyclonal
Specificity	This antibody was cross-adsorbed to unrelated phosphotyrosine peptides before affinity purification using EphA4 (Tyr-602) peptide. The purified antibody detects a 120kDa* band corresponding to EphA4 in Western blots of HUVEC cells treated with pervanadate and in mouse brain tissue.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-EphA4 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	EphA4 (Tyr-602) synthetic peptide (coupled to carrier protein) corresponds to amino acids surrounding phosphorylated tyrosine 602 in human EphA4. This sequence has significant homology to the conserved site in rat and mouse EphA4, and is conserved well in most other EphA and EphB family members.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



WB (Western Blot)

Western blot analysis of human umbilical vein endothelial cells untreated (lanes 1, 3, 5, & 7) or treated with pervanadate (1mM) 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).



IHC (Immunohistochemistry)

Paraformaldehyde-fixed zebrafish embryos were probed with anti-EphA4 (Tyr-602) (EP2731) then detected using Alexa Fluor 647 goat anti-rabbit. Arrows show labeling of somite boundaries and the notochord. (Image provided by Dr. Scott Holley at the Department of Molecular, Cellular and Developmental Biology, Yale University).

ADDITIONAL INFORMATION

Related Product Information for anti-EphA4 antibody	The Ephfamily of Receptor tyrosine kinases and their Ephrin ligands are important for cell positioning and morphogenesis during development. Ephreceptors are classified into 10 EphA and 6 EphB receptors, which preferentially bind to the type A and type B ephrins, respectively. The EphA4 receptor can inhibit axon outgrowth and has roles in regulating axon projections during neural development. EphA4 signaling pathways require its kinase activity and involve binding and activation of Rho-GTPase guanine nucleotide-exchange factors (GEFs). EphA4 activation leads autophosphorylation of Tyr-596 and Tyr-602, and the conserved sites in EphA2 are required for binding to the GEFs, Vav2 and Vav3, and ephrin-induced cell migration. The Tyr-779 site in the kinase domain is also phosphorylated in vivo and may regulate kinase activity. Activated EphA4 leads to Src kinase phosphorylation of the GEF, ephexin-1, and this activates RhoA. Thus, EphA4 signaling involves complex tyrosine phosphorylation in its cytoplasmic region along with interaction with several GEFs.
References	Fang, W.B. et al. (2008) J. Biol. Chem. 283(23):16017. Lackmann, M. & Boyd, A.W. (2008). Sci. Signal. 1(15):re2. Binns, K.L. et al. (2000) Mol. Cell. Biol. 20(13):4791.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4758280
NCBI GeneID	2043
NCBI Accession #	NP_004429.1
NCBI GenBank Nucleotide #	NM_004438.3
UniProt Accession #	P54764; Q2M380
Molecular Weight	109,860 Da
NCBI Official Full Name	ephrin type-A receptor 4
NCBI Official Synonym Full Names	EPH receptor A4
NCBI Official Symbol	EPHA4
NCBI Official Synonym Symbols	SEK; HEK8; TYRO1
NCBI Protein Information	ephrin type-A receptor 4; EK8; EPH-like kinase 8; TYRO1 protein tyrosine kinase; tyrosine-protein kinase TYRO1; tyrosine-protein kinase receptor SEK; receptor protein-tyrosine kinase HEK8
UniProt Protein Name	Ephrin type-A receptor 4
UniProt Gene Name	EPHA4
UniProt Synonym Gene Names	HEK8; SEK; TYRO1; EK8; hEK8
UniProt Entry Name	EPHA4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.