

EphA2 active protein

EphA2 Protein, Human, Recombinant (His Tag)

CATALOG #
AAA258029

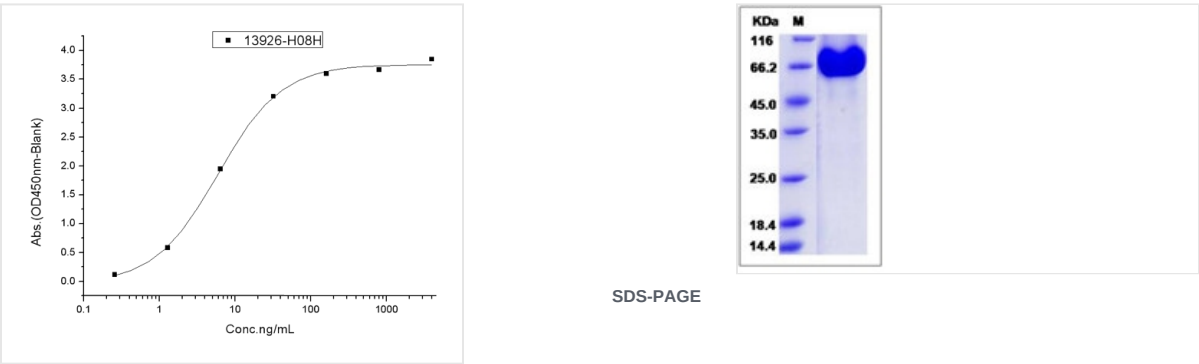
HOST
HEK293 Cells

PRODUCT SYNONYMS

EphA2; EphA2 Protein; Human; Recombinant (His Tag); Human EphA2 Protein (His Tag); ARCC2 Protein; CTPA Protein; CTPP1 Protein; CTRCT6 Protein; ECK Protein; EPH receptor A2; EphA2 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH7.5. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Asn53 4
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ala 24
Tag	C-His
Protein Construction	A DNA sequence encoding the human EPHA2 (P29317)(Met1-Asn534) was expressed with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	Measured by its binding ability in a functional ELISA. Immobilized Human EphA2 His at 2ug/ml (100uL/well) can bind Human Ephrin-A1 His & hFc. The EC50 of Human Ephrin-A1 His & hFc is 4.0-20.0ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



Application Data
Measured by its binding ability in a functional ELISA. Immobilized Human EphA2 His at 2 ug/ml (100 ul/well) can bind Human Ephrin-A1 His & hFc, the EC50 of Human Ephrin-A1 His & hFc is 4.0-20.0 ng/mL.

ADDITIONAL INFORMATION

Related Product Information for EphA2 active protein	Background: Eph receptor A2 (Ephrin type-A receptor 2 or EphA2) is a member of the ephrin receptor subfamily of the protein-tyrosine kinase family. The Eph receptors' corresponding family of ligands are the ephrins anchored to cell surfaces. The ephrins and Eph receptors are implicated as positional labels that may guide the development of neural topographic maps. They have also been found implicated in embryonic patterning, neuronal targeting, vascular development and adult neovascularization. The large family of ligands and receptors may make a major contribution to the accurate spatial patterning of connections and cell position in the nervous system. Furthermore, elevated expression of Eph receptors and ephrin ligands is associated with tumors and associated tumor vasculature, suggesting the Eph receptors and ephrin ligands also play critical roles in tumor angiogenesis and tumor growth. Unlike most Eph kinases, which are primarily expressed during development, EphA2 is primarily found in adult human epithelial cells. The cellular functions of EphA2 may be regulating cell growth, survival, migration, and angiogenesis. Unlike other receptor tyrosine kinases, ligand binding is not necessary for EphA2. Rather, the ligand appears to regulate EphA2 subcellular localization and its interactions with downstream adapter and signaling proteins. Eph receptor A2(EphA2) has been demonstrated to critically regulate tumor cell growth, migration and invasiveness. Eph receptor A2(EphA2) is frequently overexpressed and functionally altered in aggressive tumor cells, and that these changes promote metastatic character.
Product Categories/Family for EphA2 active protein	Actin Dynamics Signaling Pathway
References	Flanagan JG, et al. (1998) The ephrins and Eph receptors in neural development. Annu Rev Neurosci. 21: 309-45.Cheng N, et al. (2002) The ephrins and Eph receptors in angiogenesis. Cytokine Growth Factor Rev. 13(1): 75-85.Pratt RL, et al. (2002) Activation of the EphA2 tyrosine kinase stimulates the MAP/ERK kinase signaling cascade. Oncogene. 21(50): 7690-9.Jennifer Walker-Daniels, et al. (2003) Differential Regulation of EphA2 in Normal and Malignant Cells. Am J Pathol. 162(4): 1037-1042.

NCBI AND UNIPROT INFORMATION

NCBI GI #	32967311
NCBI GeneID	1969
NCBI Accession #	NP_004422.2
NCBI GenBank Nucleotide #	NM_004431.3
UniProt Accession #	P29317 ; Q8N3Z2
Molecular Weight	108,266 Da
NCBI Official Full Name	ephrin type-A receptor 2
NCBI Official Synonym Full Names	EPH receptor A2

NCBI Official Symbol	EPHA2
NCBI Official Synonym Symbols	ECK; CTPA; ARCC2; CTPP1; CTRCT6
NCBI Protein Information	ephrin type-A receptor 2; soluble EPHA2 variant 1; tyrosine-protein kinase receptor ECK; epithelial cell receptor protein tyrosine kinase
UniProt Protein Name	Ephrin type-A receptor 2
UniProt Gene Name	EPHA2
UniProt Synonym Gene Names	ECK
UniProt Entry Name	EPHA2_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.

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Online datasheet: <https://stage.aaabiotech.com/hek293-cells-active-protein/epha2/258029>