Active Recombinant Human EPHA2 Protein, His-Avi-tagged, Biotinylated

Cat. No. EPHA2-2028H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the human EPHA2 (NP_004422.2) (Met1-Asn534) was expressed with a c-terminal polyhistidine tagged AVI tag at the C-terminus. The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed.
Species	Human
Source	HEK293
ProteinLength	Met1-Asn534
Description	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

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	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.
Predicted N Terminal	Ala 24
Form	Lyophilized from sterile PBS, pH 7.4. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Bio-activity	Measured by its binding ability in a functional ELISA. Immobilized EFNA1-Fch at 10 μg/mL (100 μL/well) can bind Human EphA2, Biotinylated, the EC50 of Human EphA2, Biotinylated is 20-40 ng/mL.
Molecular Mass	The recombinant human EPHA2 consists of 537 amino acids and predicts a molecular mass of 59.4 kDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.
Storage	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

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Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4℃ before opening to recover the entire contents.
Conjugation	Biotin

GENE INFORMATION

Gene Name	EPHA2 EPH receptor A2 [Homo sapiens]
Official Symbol	EPHA2
Synonyms	EPHA2; EPH receptor A2; ECK, EphA2; ephrin type-A receptor 2; soluble EPHA2 variant 1; tyrosine-protein kinase receptor ECK; epithelial cell receptor protein tyrosine kinase; ECK; CTPA; ARCC2; CTPP1;
Gene ID	1969
mRNA Refseq	NM_004431
Protein Refseq	NP_004422
MIM	176946
UniProt ID	P29317

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