

Recombinant Human EphA2

Catalog No: CS03

Description Recombinant Human Ephrin A Receptor 2 is produced by our Mammalian expression system and the

target gene encoding Ala24-Asn534 is expressed with a 6His tag at the C-terminus.

Source Human Cells

Alternative name Ephrin type-A receptor 2; Epithelial cell kinase; Tyrosine-protein kinase receptor ECK; EPHA2

Accession No. P29317

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Shipping The product is shipped on dry ice/polar packs.

Upon receipt, store it immediately at the temperature listed below.

Storage Store at < -20°C, stable for 6 months after receipt.

Please minimize freeze-thaw cycles.

Amino Acid Sequence AQGKEVVLLDFAAAGGELGWLTHPYGKGWDLMQNIMNDMPIYMYSVCNVMSGDQDNWLRTNWVYR GEAERIFIELKFTVRDCNSFPGGASSCKETFNLYYAESDLDYGTNFQKRLFTKIDTIAPDEITVSSDFEAR HVKLNVEERSVGPLTRKGFYLAFQDIGACVALLSVRVYYKKCPELLQGLAHFPETIAGSDAPSLATVAGT CVDHAVVPPGGEEPRMHCAVDGEWLVPIGQCLCQAGYEKVEDACQACSPGFFKFEASESPCLECPEH TLPSPEGATSCECEEGFFRAPQDPASMPCTRPPSAPHYLTAVGMGAKVELRWTPPQDSGGREDIVYS VTCEQCWPESGECGPCEASVRYSEPPHGLTRTSVTVSDLEPHMNYTFTVEARNGVSGLVTSRSFRTA SVSINQTEPPKVRLEGRSTTSLSVSWSIPPPQQSRVWKYEVTYRKKGDSNSYNVRRTEGFSVTLDDLA

PDTTYLVQVQALTQEGQGAGSKV HEFQTLSPEGSGNHHHHHH

Background

EphA2 is a member of the Eph receptor tyrosine kinase family which binds Ephrins A1, 2, 3, 4, and 5. Receptor tyrosine kinase which binds promiscuously membrane-bound ephrin-A 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. EphA2 becomes autophosphorylated following ligand binding and then interacts with SH2 domain-containing PI3-kinase to activate MAPK pathways. Reverse signaling is also propagated through the Ephrin ligand. Transcription of EphA2 is dependent on the expression of E-Cadherin, and can be induced by p53 family transcription factors. EphA2 is upregulated in breast, prostate, and colon cancer vascular endothelium. Its ligand, EphrinA1, is expressed by the local tumor cells. In some cases, EphA2 and EphrinA1 are expressed on the same blood vessels. EphA2 signaling cooperates with VEGF receptor signaling in promoting endothelial cell migration.

SDS-Page



