Recombinant Human EphA2

Catalog#:AC80165 Derived from Human Cells

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.

Accession#: P29317

Known as: Ephrin type-A receptor 2; Epithelial cell kinase; Tyrosine-protein kinase receptor ECK; EPHA2

Formulation

Lyophilized from a 0.2 μm filtered solution of PBS, 5% Trehalose, pH 7.4.

Shipping

The product is shipped at ambient temperature.

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

Storage

Lyophilized protein should be stored at<-20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days.

Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Control

Mol Mass:57kDa

AP Mol Mass:65-75kDa, reducing conditions.

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

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

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.