Recombinant Protein Technical Manual

Recombinant Human EphA2 Protein (aa 585-976, His & GST Tag)(Active)

RPES2499

Product Data:

Product SKU: RPES2499

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P29317

Protein Information:

Molecular Mass:	72.1 kDa
AP Molecular Mass:	62 kDa
Tag:	N-His-GST
Bio-activity:	The specific activity was determined to be 50 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as sterile 20mM Tris, 500mM NaCl, 3mM DTT, pH 8.5, 10% gly
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Ephrin type-A receptor 2; Epithelial cell kinase; Tyrosine-protein kinase receptor ECK; EPHA2;ARCC2;CTPA;CTPP1;CTRCT6;ECK

Immunogen Information:

Sequence: Leu 585-Ile 976

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.