

Recombinant Protein Technical Manual

Recombinant Rat EphA7/EHK3 Protein (His Tag)(Active) RPES0929

Product Data:

Product SKU: RPES0929 **Size:** 200μg

Species: Rat Expression host: HEK293 Cells

Uniprot: P54759

Protein Information:

Molecular Mass: 58.9 kDa

AP Molecular Mass: 59 kDa

Tag: C-His

Bio-activity: Immobilized rat EPHA7-His at 10 μg/ml (100 μl/well) can bind mouse EFNA4-Fc,

The EC50 of mouse EFNA4-Fc is 10.0-23.4 ng/ml.

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per μg of the protein as determined by the LAL method

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

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

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: EPHA7;Ehk-3;Ehk3

Immunogen Information:

Sequence: Met1-Ser539

Background:

Ephrin type-A receptor 7, also known as EphA7, belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family which 16 known receptors (14 found in mammals) are involved: EPHA1, EPHA2, EPHA3, EPHA4, EPHA5, EPHA6, EPHA7, EPHA8, EPHA9, EPHA10, EPHB1, EPHB2, EPHB3, EPHB4, EPHB5, EPHB6. The Eph family of receptor tyrosine kinases (comprising EphA and EphB receptors) has been implicated in synapse formation and the regulation of synaptic function and plasticity6. Eph receptor-mediated signaling, which is triggered by ephrins7, probably modifies the properties of synapses during synaptic activation and remodeling. Ephrin receptors are components of cell signalling pathways involved in animal growth and development, forming the largest sub-family of receptor tyrosine kinases (RTKs). Ligand-mediated activation of Ephs induce various important downstream effects and Eph receptors have been studied for their potential roles in the development of cancer. Down-regulation of EphA7 secondary to hypermethylation has been reported in colorectal cancer. The expression of EphA7 was reduced in all tested gastric cancer cell lines; however, there is marked variability in expression among gastric carcinoma specimens. EphA7 may have roles in the pathogenesis and development of gastric carcinomas.