Recombinant Human c-KIT/CD117 Protein (Fc Tag)

Catalog Number: PKSH030941

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

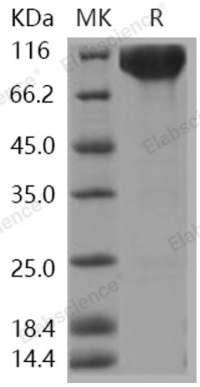
Description

Species	Human
Source	HEK293 Cells-derived Human c-KIT/CD117 protein Met 1-Thr516, with an C-terminal hFc
Calculated MW	82.0 kDa
Observed MW	93-115 kDa
Accession	P10721-2
Bio-activity	Immobilized human KIT-Fc at 10 μg/ml (100 μl/well) can bind biotinylated mouse KITL-His (1-189), The EC_{50} of biotinylated mouse KITL-His (1-189)) is 2. 87-6. 71 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



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Background

C-Kit is a type 3 transmembrane receptor for MGF (mast cell growth factor; also known as stem cell factor). c-Kit contains 5 Ig-like C2-type (immunoglobulin-like) domains.and 1 protein kinase domain. It belongs to the protein kinase superfamily; tyr protein kinase family and CSF-1/PDGF receptor subfamily. C-Kit contains 5 Ig-like C2-type (immunoglobulin-like) domains and 1 protein kinase domain. C-Kit has a tyrosine-protein kinase activity. Binding of the ligands leads to the autophosphorylation of KIT and its association with substrates such as phosphatidylinositol 3-kinase. Antibodies to c-Kit are widely used in immunohistochemistry to help distinguish particular types of tumour in histological tissue sections. It is used primarily in the diagnosis of GISTs. In GISTs; c-Kit staining is typically cytoplasmic; with stronger accentuation along the cell membranes. C-Kit antibodies can also be used in the diagnosis of mast cell tumours and in distinguishing seminomas from embryonal carcinomas. Mutations in c-Kit gene are associated with gastrointestinal stromal tumors; mast cell disease; acute myelogenous lukemia; and piebaldism. Defects in KIT are a cause of acute myelogenous leukemia (AML). AML is a malignant disease in which hematopoietic precursors are arrested in an early stage of development. Note=Somatic mutations that lead to constitutive activation of KIT are detected in AML patients.

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