Recombinant Human c-KIT/CD117 Protein (aa 540-972, His & GST Tag)





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

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Synonyms Mast/stem cell growth factor receptor Kit;SCFR;Piebald trait protein;PBT;Proto-

oncogene c-Kit;Tyrosine-protein kinase Kit;p145 c-kit;v-kit Hardy-Zuckerman 4

feline sarcoma viral oncogene homolog;CD117;PBT

Species Human

Expression Host Baculovirus-Insect Cells

Sequence Thr 540-Val 972

AccessionP10721-2Calculated Molecular Weight76.8 kDaObserved molecular weight68 kDaTagN-His-GST

Properties

Purity > 92 % 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°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 50mM Tris, 100mM NaCl, pH 8.0, 20% glycerol, 3mM

DTT

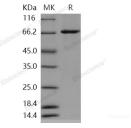
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed m

Reconstitution Please refer to the printed manual for detailed information.

Data



> 92 % as determined by reducing SDS-PAGE.

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.

For Research Use Only

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Catalog Number:PKSH030938

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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