# **Recombinant Mouse c-kit/CD117 Protein (His Tag)**

Catalog Number:PKSM040632



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

## **Description**

Synonyms Bs;c-KIT;CD117;Fdc;Gsfsco1;Gsfsco5;Gsfsow3;SCO1;SCO5;SOW3;Ssm;Tr-kit;

Species Mouse

Expression Host HEK293 Cells
Sequence Met 1-Thr 523
Accession NP 001116205.1

Calculated Molecular Weight 57.0 kDa
Observed molecular weight 70-80 kDa
Tag C-His

Bioactivity Immobilized mouse KIT at 2 μg/ml (100 μl/well) can bind biotinylated mouse KITL

with a linear ranger of 1. 28-6. 4 ng/ml.

### **Properties**

**Purity** > 97 % 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 PBS, pH 7.4

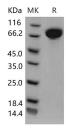
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

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

#### Data



> 97 % 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. Antibodies to c-Kit are widely used in immunohistochemistry to help distinguish particular types of tumour in histological

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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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