

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

Catalog Number: PDMM100160

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

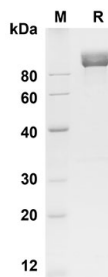
### Description

Species	Mouse
Source	Mammalian-derived Mouse CD117/c-kit proteins Ser25-Pro527, with an C-terminal Fc
Calculated MW	80.2 kDa
Observed MW	90 kDa
Accession	P05532
Bio-activity	Not validated for activity

### Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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 a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



SDS-PAGE analysis of Mouse CD117/c-kit proteins ,  
2µg/lane of Recombinant Mouse CD117/c-kit proteins was  
resolved with SDS-PAGE under reducing conditions ,  
showing bands at 90 KD

### 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 has 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 tumor 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 tumors and in distinguishing seminomas from embryonal carcinomas. Mutations in the c-Kit gene are associated with gastrointestinal stromal tumors , mast cell disease , acute myelogenous leukemia , 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.