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



RPES8487

Product Information

Product SKU: RPES8487 Expression Host: Mammalian Size: 20μg

Tag: C-Fc Reactivity: Mouse Accession: P05532

Additional Information

Calculated MW: 80.2 kDa Observed MW: 90 kDa

Sequence: Ser25-Pro527

Protein Information

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 tyrosineprotein 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.

Synonyms:

SOW, Gsfsow, SCO, W, Bs, Fdc, Ssm, SCO1, SCO5, SOW3, CD117, c-KIT, Tr-kit, Gsfsco1, Gsfsco5, Gsfsow3, Mast/stem cell growth factor receptor Kit, Proto-oncogene c-Kit, SCFR, Tyrosine-protein kinase Kit, Sl, Kit, SCFR, CD117, c-KIT, Fdc, Gsfsco1, Gsfsco5,

Gsfsow3, SCO1, SCO5, SOW3, Ssm, Tr-kit, KIT proto-oncogene receptor tyrosine

kinase, PBT

Endotoxin: < 1.0 EU/mg of the protein as determined by the LAL method

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.

Purity: > 90% as determined by reducing SDS-PAGE.

Bio-Activity: Not validated for activity

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.