

**Recombinant Human c-KIT / CD117 Protein (His tag)**

**Cat.NO.: TP08558**

3th Edition

**Synonyms:**C-Kit;CD117;PBT;SCFR

**Description:**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 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.

**Form:**PBS

**Molecular Weight:**56.7 kDa

**Sequences:**Met 1-Thr 516

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.