

## **CD117-FC recombinant protein**

Catalog No: YD3071

**Reactivity:** Human;

Purity: >90% as determined by SDS-PAGE

Gene Name: KIT

**Protein Name:** Mast/stem cell growth factor receptor Kit (SCFR) (EC 2.7.10.1) (Piebald trait

protein) (PBT) (Proto-oncogene c-Kit) (Tyrosine-protein kinase Kit) (p145 c-kit) (v-

kit Hardy-Zuckerman 4 feline sarcoma v

**Sequence :** Amino acid:26-524, with FC tag.

P10721

Human Gene ld: 3815

**Human Swiss Prot** 

No:

**Formulation:** Phosphate-buffered solution

**Source :** Mammalian cells

**Storage Stability:** -15°C to -25°C/1 year(Avoid freeze / thaw cycles)

**Function:** Tyrosine-protein kinase that acts as a cell-surface receptor for the cytokine

KITLG/SCF and plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. In response to

KITLG/SCF binding, KIT can activate several signaling pathways.

Phosphorylates PIK3R1, PLCG1, SH2B2/APS and CBL. Activates the AKT1 signaling pathway by phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Activated KIT also transmits signals via GRB2 and

activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or

MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3, STAT5A and STAT5B. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KIT signaling

is modulated

Subcellular Location:

[Isoform 1]: Cell membrane; Single-pass type I membrane protein.; [Isoform 2]: Cell membrane; Single-pass type I membrane protein.; [Isoform 3]: Cytoplasm .



Note=Detected in the cytoplasm of spermatozoa, especially in the equatorial and subacrosomal region of the sperm head. .

## **Expression:**

[Isoform 3]: In testis, detected in spermatogonia in the basal layer and in interstitial Leydig cells but not in Sertoli cells or spermatocytes inside the seminiferous tubules (at protein level) (PubMed:20601678). Expression is maintained in ejaculated spermatozoa (at protein level) (PubMed:20601678).

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