## For Research Use Only

## c-Kit/CD117 Monoclonal antibody

Catalog Number: 60169-1-Ig



**Purification Method:** 

Protein G purification

CloneNo.:

2E8G4

**Basic Information** 

Catalog Number:

60169-1-lg

Size:

1000 µg/ml Source:

Mouse Isotype:

lgG2b

GenBank Accession Number:

BC071593

GeneID (NCBI):

3815

UNIPROT ID: P10721

Full Name:

v-kit Hardy-Zuckerman 4 feline

sarcoma viral oncogene homolog

Calculated MW: 110 kDa

Observed MW:

120 kDa

**Applications** 

**Tested Applications:** 

ELISA

Species Specificity:

human

## **Background Information**

KIT, also named as SCFR, c-Kit and CD117, is a transmembrane tyrosine kinase encoded by the cKit proto oncogene. It is a type 3 transmembrane receptor for MGF (mast cell growth factor, also known as stem cell factor). KIT acts to regulate a variety of biological responses including cell proliferation, apoptosis, chemotaxis and adhesion. Ligand(SCF) binding to the extracellular domain leads to autophosphorylation on several tyrosine residues within the cytoplasmic domain, and activation. Phosphorylation at tyrosine 721 of KIT allows binding and activation of PI3 kinase. Loss of expression of KIT appears to be associated with progression of some tumors (melanoma) and autocrine/paracrine stimulation of the kit/SCF system may participate in human solid tumors such as lung, breast, testicular and gynecological malignancies. Mutations in Kit have been found to be important for tumor growth and progression in a variety of cancers including mast cell diseases, gastrointestinal stromal tumor, acute myeloid leukemia, Ewing sarcoma and lung cancer.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data