## **Summary**

**Production Name** c-Kit (8Y9) Rabbit Monoclonal Antibody

**Description** Recombinant rabbit monoclonal antibody

**Host** Rabbit

**Application** WB,IHC,IF-P **Reactivity** Mouse,Rat

### **Performance**

ConjugationUnconjugatedModificationUnmodified

**Isotype** IgG

Clonality Monoclonal Form Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw Storage

cycles.

Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type **Buffer** 

preservative N and 0.05% protective protein.

**Purification** Affinity purification

#### **Immunogen**

Gene Name KIT

CD117; EC 2.7.10.1; Mast/stem cell growth factor receptor precursor; SCFR; SL; c-kit; Alternative Names

kinase Kit; C Kit; SCF Receptor;

Gene ID 3815.0

SwissProt ID P10721.Recombinant protein of human c-Kit

# **Application**

**Dilution Ratio** WB 1:500-1:2000,IHC 1:500-1:2000,IF-P 1:500-1:2000

Molecular Weight 110kDa

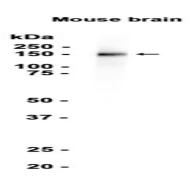
## **Background**

KIT encodes the human homolog of the proto-oncogene c-kit. C-kit was first identified as the cellular homolog of the feline sarcoma viral oncogene v-kit. KIT is a type 3 transmembrane receptor for MGF (mast cell growth factor, also known as stem cell factor). Mutations in KIT are associated with gastrointestinal stromal tumors, mast cell disease, acute myelogenous lukemia, and piebaldism. Tyrosine-protein kinase that acts as 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 by protein phosphatases, and by rapid internalization and degradation of the receptor. Activated KIT promotes phosphorylation of the protein phosphatases PTPN6/SHP-1 and PTPRU, and of the transcription factors STAT1, STAT3, STAT5A and STAT5B. Promotes phosphorylation of PIK3R1, CBL, CRK (isoform Crk-II), LYN, MAPK1/ERK2 and/or MAPK3/ERK1, PLCG1, SRC and SHC1.

#### Research Area

Immunology

#### **Image Data**



Western blot analysis of extracts from Mouse brain tissue using RM4368 at 1:1000.

#### Note

For research use only.

Web: https://www.enkilife.com E-mail: order@enkilife.com techsupport@enkilife.com Tel: 0086-27-87002838