c-Kit Polyclonal Antibody

Catalog No. E-AB-30933
Reactivity H,M
Storage Store at -20°C. Avoid freeze / thaw cycles.
Host Rabbit
Isotype IgG

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Immunogen Information

Immunogen Synthesized peptide derived from human c-Kit around the non-phosphorylation site of Tyr936.
Swissprot P10721
Synonyms KIT, SCFR, Mast/stem cell growth factor receptor Kit, SCFR, Piebald trait protein, PBT, Proto-oncogene c-Kit, Tyrosine-protein kinase Kit, p145 c-kit, v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog, CD antigen CD117

Product Information

Calculated MW 110kDa
Observed MW 117kDa
Buffer PBS with 0.02% sodium azide, 0.5% BSA and 50% glycerol, pH7.4
Purify Affinity purification
Dilution WB 1:500-1:2000, IHC 1:100-1:300, ELISA 1:5000

Background

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.