



c-KIT/CD117 Antibody

Rabbit Monoclonal Antibody (Mab)
Catalog # AD80217

Specification

c-KIT/CD117 Antibody - Product info

Application IHC
Primary Accession P10721
Reactivity Human
Host Rabbit
Clonality Monoclonal
Calculated MW 109865

c-KIT/CD117 Antibody - Additional info

Gene ID 3815
Gene Name KIT

Other Names

Mast/stem cell growth factor receptor Kit, SCFR, 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 viral oncogene homolog, CD117, KIT, SCFR

Dilution

IHC~~Ready-to-use

Storage

Maintain refrigerated at 2-8°C

Precautions c-KIT/CD117 Antibody is for research use

only and not for use in diagnostic or

therapeutic procedures.

c-KIT/CD117 Antibody - Protein Information

Name KIT

Synonyms SCFR

Function

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



Cellular Location

Tissue Location

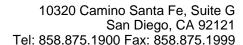
pathway by phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Activated KIT also transmits signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3, STAT5A and STAT5B. Activation 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. **Isoform 1: 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 Isoform 1 and isoform 2 are detected in spermatogonia and Leydig cells. Isoform 3 is detected in round spermatids, elongating spermatids and spermatozoa (at protein level). Widely expressed. Detected in the hematopoietic system, the gastrointestinal system, in melanocytes and in germ cells

c-KIT/CD117 Antibody - Protocols

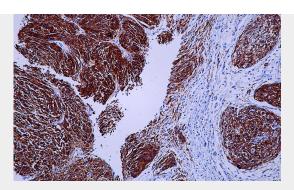
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

c-KIT/CD117 Antibody - Images







Immunohistochemical analysis of paraffin-embedded gastrointestinal stromal tumor tissue using AD80217 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a Citrate buffer (pH6. 0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSeeTM Detection Systems Abcepta: AR005 was used as the secondary antibody.