10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KIT Antibody (Center Y362)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP18711c

Specification

KIT Antibody (Center Y362) - Product Information

Application	**WB,E**
Primary Accession	P10721
Other Accession	NP_000213.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**109865**
Antigen Region	**340-369**

KIT Antibody (Center Y362) - Additional Information

Gene ID 3815

Other Names
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, CD117, KIT, SCFR

Target/Specificity
This KIT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 340-369 amino acids from the Central region of human KIT.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
KIT Antibody (Center Y362) is for research use only and not for use in diagnostic or therapeutic procedures.

KIT Antibody (Center Y362) - Protein Information

Name KIT

Synonyms SCFR

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 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.

Cellular Location
[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.

Tissue Location
[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)

KIT Antibody (Center Y362) - 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

KIT Antibody (Center Y362) - Images

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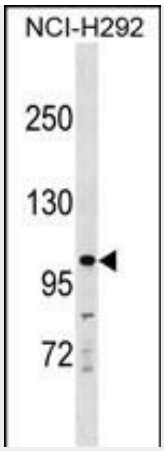

KIT Antibody (Center Y362)(Cat. #AP18711c) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the KIT antibody detected the KIT protein (arrow).

KIT Antibody (Center Y362) - Background

This is the receptor for stem cell factor (mast cell growth factor). It has a tyrosine-protein kinase activity. Binding of the ligands leads to the autophosphorylation of KIT and its association with substrates such as phosphatidylinositol 3-kinase (Pi3K).

KIT Antibody (Center Y362) - References

Molderings, G.J., et al. Immunogenetics 62 (11-12), 721-727 (2010) :
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Chi, P., et al. Nature 467(7317):849-853(2010)
Rossi, S., et al. Am. J. Surg. Pathol. 34(10):1480-1491(2010)
Chen, P., et al. World J. Gastroenterol. 16(33):4227-4232(2010)