

Rabbit KIT Polyclonal Antibody | anti-KIT antibody

KIT Antibody (Y721)

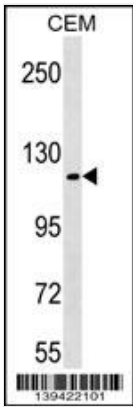
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA290659	Rabbit	Human; Predicted Reactivity: Pig	ELISA, Western Blot

PRODUCT SYNONYMS

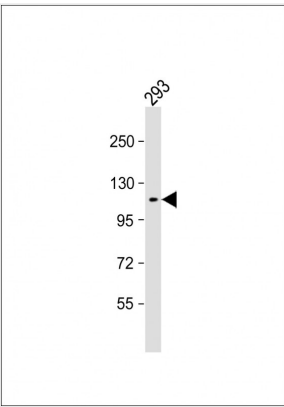
KIT; Polyclonal Antibody; KIT Antibody (Y721); Mast/stem cell growth factor receptor Kit; SCFR; Piebald trait protein; PBT; Proto-oncogene c-Kit; Tyrosine-protein kinase Kit; p145 c-kit; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog; CD117; anti-KIT antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human; Predicted Reactivity: Pig
Clonality	Polyclonal
Isotype	Ig
Specificity	This KIT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide corresponding to amino acid residues surrounding Y721 of human KIT.
Form/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.
Sequence Length	976
Applicable Applications for anti-KIT antibody	ELISA, WB (Western Blot)
Subtitle	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
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 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.
Antigen Type	Synthetic Peptide
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



WB (Western Blot)
KIT Antibody (Y721) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the KIT antibody detected the KIT protein (arrow).



WB (Western Blot)
Anti-KIT Antibody (Y721) at 1:1000 dilution + 293 whole cell lysate. Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 110 kDa. Blocking/Dilution buffer: 5% NFDM/TBST.

ADDITIONAL INFORMATION

Related Product Information for anti-KIT antibody	Description: KIT is 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 leukemia, and piebaldism. 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.
Product Categories/Family for anti-KIT antibody	Primary Antibodies; Cancer; Developmental Biology; Immunology; Neuroscience; Signal Transduction
References	Wardelmann, E., et al., Int. J. Cancer 106 (6):887-895 (2003). Lennartsson, J., et al., Exp. Cell Res. 288 (1):110-118 (2003). Sakuma, Y., et al., Cancer Sci 94 (6):486-491 (2003). Araki, K., et al., Lung Cancer 40 (2):173-180 (2003). Voytyuk, O., et al., J. Biol. Chem. 278 (11):9159-9166 (2003).

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557695
NCBI GeneID	3815
NCBI Accession #	NP_000213.1
NCBI GenBank Nucleotide #	NM_000222.2
UniProt Accession #	P10721; Q6IQ28; Q99662; Q9UM99; B5A956; D5LXN2; D5M931; F5H8F8
Molecular Weight	109865 Da
NCBI Official Full Name	mast/stem cell growth factor receptor Kit isoform 1
NCBI Official Synonym Full Names	KIT proto-oncogene receptor tyrosine kinase

NCBI Official Symbol	KIT
NCBI Official Synonym Symbols	PBT; SCFR; C-Kit; CD117
NCBI Protein Information	mast/stem cell growth factor receptor Kit
UniProt Protein Name	Mast/stem cell growth factor receptor Kit
UniProt Gene Name	KIT
UniProt Synonym Gene Names	SCFR; SCFR; PBT
UniProt Entry Name	KIT_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/kit-antibody-western-blot-elisa/290659>