

anti-Human c-Kit Polyclonal Antibody | anti-c-Kit antibody

Anti-c-Kit Antibody

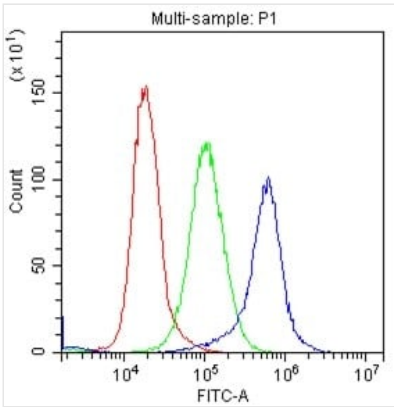
CATALOG # AAA46218	REACTIVITY Human	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

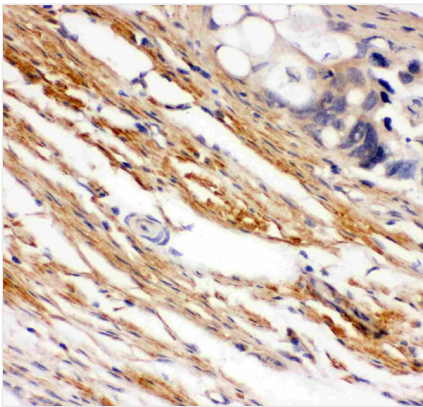
c-Kit; Polyclonal Antibody; Anti-c-Kit Antibody; Mast/stem cell growth factor receptor Kit; C Kit; CD 117; CD117; CD117 antigen; KIT; KIT oncogene; KIT_HUMAN; Mast cell growth factor receptor; Mast/stem cell growth factor receptor; p145 c-kit; PBT; Piebald trait protein; Proto oncogene c Kit; Proto oncogene tyrosine protein kinase Kit; Proto-oncogene c-Kit; SCF Receptor; SCFR; soluble KIT variant 1; Steel Factor Receptor; Stem cell factor receptor; tyrosine protein kinase Kit; Tyrosine-protein kinase Kit; v kit Hardy Zuckerman 4 feline sarcoma viral oncogene homolog; v kit Hardy Zuckerman 4 feline sarcoma viral oncogene like protein; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog; anti-c-Kit antibody

PRODUCT SPECIFICATIONS

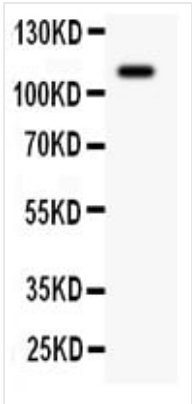
Reactivity	Human
Clonality	Polyclonal
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Sequence Length	976
Applicable Applications for anti-c-Kit antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human c-Kit recombinant protein (Position: Q26-S285). Human c-Kit shares 66% amino acid (aa) sequence identity with mouse c-Kit.
Ig Type	Rabbit IgG
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquoted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



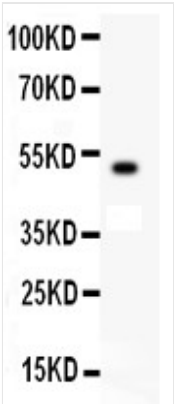
FCM/FACS (Flow Cytometry)
Figure 4. Flow Cytometry analysis of K562 cells using anti-C-Kit antibody (AAA46218).Overlay histogram showing K562 cells stained with AAA46218 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-C-Kit Antibody (AAA46218,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight 488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)
Figure 3. IHC analysis of C-Kit using anti-C-Kit antibody (AAA46218).C-Kit was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-C-Kit Antibody (AAA46218) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)
Figure 2. Western blot analysis of C-Kit using anti-C-Kit antibody (AAA46218).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.Lane 1: HEPG2 Whole Cell LysateAfter Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-C-Kit antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for C-Kit at approximately109KD. The expected band size for C-Kit is at 109KD.



WB (Western Blot)
Figure 1. Western blot analysis of C-Kit using anti-C-Kit antibody (AAA46218).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.Lane 1: Recombinan Human C-Kit Protein 0.5ngAfter Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-C-Kit antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for C-Kit at approximately49KD. The expected band size for C-Kit is at 49KD.

ADDITIONAL INFORMATION

Related Product Information for anti-c-Kit antibody	Description: Rabbit IgG polyclonal antibody for Mast/stem cell growth factor receptor Kit(KIT) detection. Tested with WB, IHC-P in Human. Background: SCFR(Mast/stem cell growth factor receptor), also known as KIT ONCOGENE or CD117, is a protein that in humans is encoded by the KIT gene. KIT was first described as the cellular homolog of the feline sarcoma viral oncogene v-kit. The KIT gene is mapped on 4q12. Kit was expressed on the surface of germ cells up to the pachytene stage. Signaling from the KIT receptor tyrosine kinase is essential for primordial germ cell growth both in vivo and in vitro. Determination of the KIT effectors acting in primordial germ cells has been hampered by the lack of effective methods to manipulate easily gene expression in these cells.
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References	1. Barker, P. E., Besmer, P., Ruddle, F. H. Human c-kit oncogene on human chromosome 4. (Abstract) Am. J. Hum. Genet. 37: A143, 1985. 2. Chen, L. L., Sabripour, M., Wu, E. F., Prieto, V. G., Fuller, G. N., Frazier, M. L. A mutation-created novel intra-exonic pre-mRNA splice site causes constitutive activation of KIT in human gastrointestinal stromal tumors. Oncogene 24: 4271-4280, 2005. 3. Andre C, Hampe A, Lachaume P, Martin E, Wang XP, Manus V, Hu WX, Galibert F (January 1997). "Sequence analysis of two genomic regions containing the KIT and the FMS receptor tyrosine kinase genes". Genomics 39(2): 216-26. 4. Yarden Y, Kuang WJ, Yang-Feng T, Coussens L, Munemitsu S, Dull TJ, Chen E, Schlessinger J, Francke U, Ullrich A (November 1987). "Human proto-oncogene c-kit: a new cell surface receptor tyrosine kinase for an unidentified ligand". EMBO J. 6 (11): 3341-51.
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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	46,658 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.