

KIT/CD117 recombinant protein

Recombinant KIT/CD117 (546-976) protein

CATALOG #
AAA60242

HOST
Baculovirus

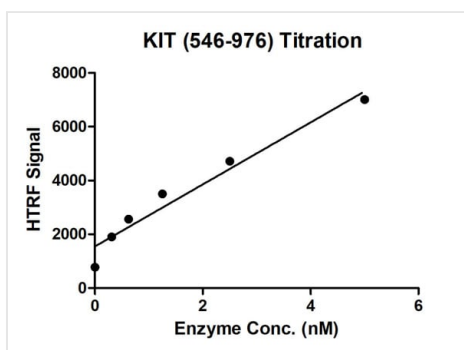
PRODUCT SYNONYMS

KIT/CD117; Recombinant KIT/CD117 (546-976) protein; KIT Proto-Oncogene; Receptor Tyrosine Kinase; CD117; KIT/CD117 recombinant protein

PRODUCT SPECIFICATIONS

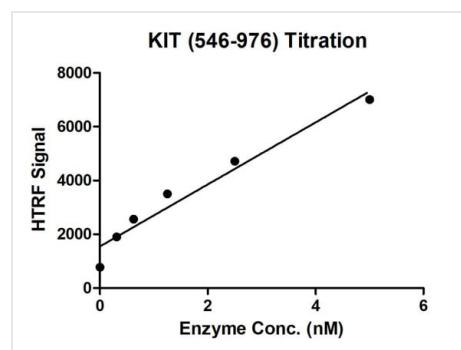
Host	Baculovirus
Form/Format	Recombinant KIT (546-976) protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Protein Details	Recombinant KIT (546-976) protein that includes amino acids 546-976 of human KIT protein (accession number NP_000213.1) was expressed in a baculovirus expression system, and contains an N-terminal DYKDDDDK tag.
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



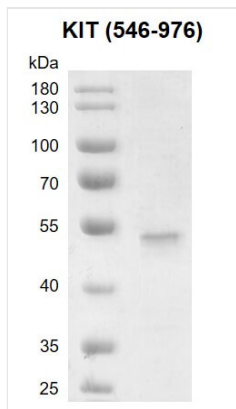
Application Data

HTRF assay for KIT (546-976) activity 1 uM TK substrate was incubated with different concentrations of KIT (546-976) protein in a 10 ul reaction system containing 1xEnzymatic Buffer, 5 mM MgCl₂, 1 mM DTT, 1 mM MnCl₂, 5 nM SEB and 100 uM ATP for 1 hour. Then 10 ul detection reagents containing TK antibody (1:2) and SA-XL665 (1:100) diluted with 1x Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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SDS-PAGE

Recombinant KIT (546-976) protein 10% SDS-PAGE gel with Coomassie blue staining MW:
50 kDa Purity: >95%

ADDITIONAL INFORMATION

Related Product Information for KIT/CD117 recombinant protein	Background: KIT (KIT Proto-Oncogene, Receptor Tyrosine Kinase) is a 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. KIT phosphorylates PIK3R1, PLCG1, SH2B2/APS and CBL and 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. KIT 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. Diseases associated with KIT include Gastrointestinal Stromal Tumor and Piebald Trait.
Product Categories/Family for KIT/CD117 recombinant protein	Recombinant Proteins ; Kinase

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	109,865 Da
NCBI Official Full Name	mast/stem cell growth factor receptor Kit isoform 1
NCBI Official Synonym Full Names	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog
NCBI Official Symbol	KIT
NCBI Official Synonym Symbols	PBT; SCFR; C-Kit; CD117
NCBI Protein Information	mast/stem cell growth factor receptor Kit; p145 c-kit; proto-oncogene c-kit; piebald trait protein; soluble KIT variant 1; tyrosine-protein kinase Kit; proto-oncogene tyrosine-protein kinase Kit; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene-like
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.

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Online datasheet: <https://stage.aaabiotech.com/kit-recombinant-protein-baculovirus/60242>