Recombinant Human KIT protein, Fc-tagged

Cat. No. KIT-443H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human KIT (Gln26-Thr516) protein was fused to human IgG1 Fc tag at C-terminus and expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	Gln26-Thr516
Description	Mast/stem cell growth factor receptor Kit (c-Kit), a member of the protein kinase superfamily, Tyr protein kinase family and CSF-1/PDGF receptor subfamily, is also known as piebald trait protein (PBT), p145 c-kit, tyrosine-protein kinase Kit and CD117,which contains five Ig-like C2-type (immunoglobulin-like) domains and one protein kinase domain. CD117 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, CD117 can activate several signaling pathways. Furthermore, Activated KIT promotes phosphorylation of the protein phosphatases PTPN6/SHP-1 and PTPRU, and of the transcription factors STAT1, STAT3, STAT5A and STAT5B.
Predicted N Terminal	Gln26
Form	Lyophilized from 0.22 μm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.

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Molecular Mass	The protein has a calculated MW of 81.9 kDa. The protein migrates as 100-125 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4℃ before opening to recover the entire contents.

GENE INFORMATION

Gene Name	KIT
Official Symbol	KIT
Synonyms	KIT; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog; PBT, piebald trait; mast/stem cell growth factor receptor Kit; C Kit; CD117; SCFR; 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 protein; PBT; C-Kit
Gene ID	3815

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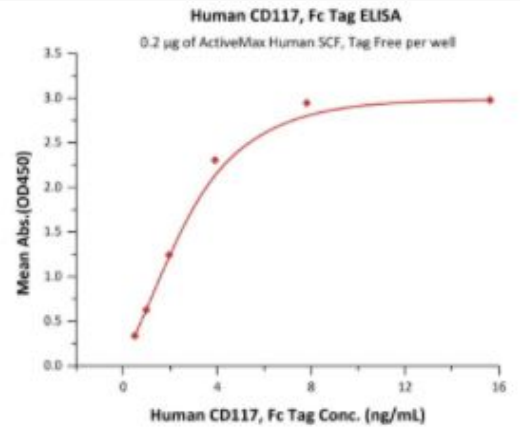
mRNA Refseq	NM_000222
Protein Refseq	NP_000213
MIM	164920
UniProt ID	P10721
Bioactivity-ELISA of KIT-443H	 Immobilized Human SCF, Tag Free at 2 μg/mL (100 μL/well) can bind Human CD117, Fc Tag with a linear range of 0.5-4 ng/mL (QC tested).

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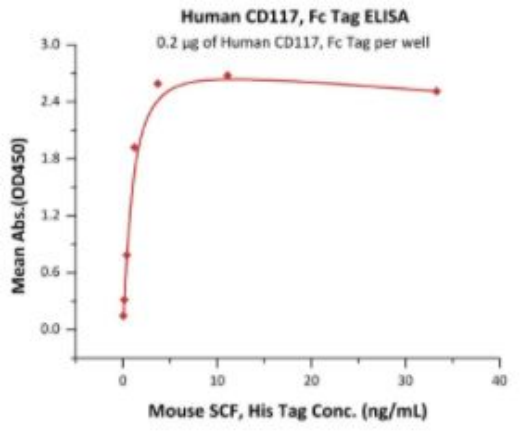
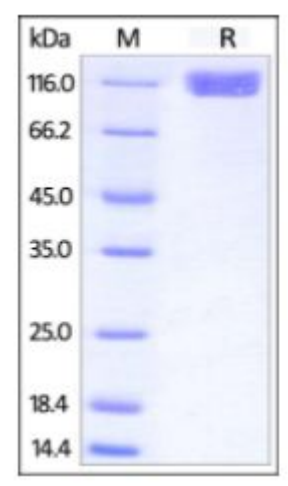
Bioactivity-ELISA	 Immobilized Human CD117, Fc Tag at 2 μg/mL (100 μL/well) can bind Mouse SCF, His Tag with a linear range of 0.05-1 ng/mL (Routinely tested).
SDS-PAGE of KIT-443H	 Human CD117, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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