Datasheet for ABIN7317438

KIT Protein (AA 540-972) (GST tag,His tag)

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Overview

Quantity:	50 µg
Target:	KIT
Protein Characteristics:	AA 540-972
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KIT protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human c-KIT/CD117 Protein (aa 540-972, His & GST Tag)
Sequence:	Thr 540-Val 972
Characteristics:	A DNA sequence encoding the human KIT isoform 2 (P10721-2) cytoplasmic domain (Thr 540-Val 972) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 92 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	KIT
Alternative Name:	c-KIT/CD117 (KIT Products)
Background:	Background: C-Kit is a type 3 transmembrane receptor for MGF (mast cell growth factor; also

Target Details

	known as stem cell factor). c-Kit contains 5 Ig-like C2-type (immunoglobulin-like) domains.and 1 protein kinase domain. It belongs to the protein kinase superfamily; tyr protein kinase family and CSF-1/PDGF receptor subfamily. C-Kit contains 5 Ig-like C2-type (immunoglobulin-like) domains and 1 protein kinase domain. C-Kit 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. Antibodies to c-Kit are widely used in immunohistochemistry to help distinguish particular types of tumour in histological tissue sections. It is used primarily in the diagnosis of GISTs. In GISTs; c-Kit staining is typically cytoplasmic; with stronger accentuation along the cell membranes. C-Kit antibodies can also be used in the diagnosis of mast cell tumours and in distinguishing seminomas from embryonal carcinomas. Mutations in c-Kit gene are associated with gastrointestinal stromal tumors; mast cell disease; acute myelogenous lukemia; and piebaldism. Defects in KIT are a cause of acute myelogenous leukemia (AML). AML is a malignant disease in which hematopoietic precursors are arrested in an early stage of development. Note=Somatic mutations that lead to constitutive activation of KIT are detected in AML patients.Immune Checkpoint Immunotherapy Cancer Immunotherapy Targeted Therapy Synonym: 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;PBT
Molecular Weight:	76.8 kDa
Pathways:	RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Sensory Perception of Sound, Stem Cell Maintenance, Production of Molecular Mediator of Immune Response, Regulation of long-term Neuronal Synaptic Plasticity

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 50 mM Tris, 100 mM NaCl, pH 8.0, 20 % glycerol, 3 mM DTT
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Handling

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.