



c-Kit (phospho Tyr721) Polyclonal Antibody

Catalog No	YP-Ab-12968
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	KIT
Protein Name	Mast/stem cell growth factor receptor Kit
Immunogen	The antiserum was produced against synthesized peptide derived from human c-Kit around the phosphorylation site of Tyr721. AA range:688-737
Specificity	Phospho-c-Kit (Y721) Polyclonal Antibody detects endogenous levels of c-Kit protein only when phosphorylated at Y721.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	KIT; SCFR; 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; CD antigen CD117
Observed Band	110kD
Cell Pathway	[Isoform 1]: Cell membrane; Single-pass type I membrane protein.; [Isoform 2]: Cell membrane; Single-pass type I membrane protein.; [Isoform 3]: Cytoplasm . Detected in the cytoplasm of spermatozoa, especially in the equatorial and subacrosomal region of the sperm head. .
Tissue Specificity	[Isoform 3]: In testis, detected in spermatogonia in the basal layer and in interstitial Leydig cells but not in Sertoli cells or spermatocytes inside the seminiferous tubules (at protein level) (PubMed:20601678). Expression is maintained in ejaculated spermatozoa (at protein level) (PubMed:20601678).
Function	catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.;disease:Defects in KIT are a cause of gastrointestinal stromal tumor (GIST) [MIM:606764].;disease:Defects in KIT are a cause of piebaldism [MIM:172800]. Piebaldism is an autosomal dominant genetic developmental abnormality of pigmentation characterized by congenital patches of white skin and hair that lack melanocytes.;disease:Defects in KIT have been associated with testicular tumors [MIM:273300]. It includes germ cell tumor (GCT) or testicular germ cell tumor (TGCT).;function:This is the receptor for stem cell factor (mast



cell growth factor). It 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 (Pi3K).,online information:CD117 entry,similarity:Belongs to the protein kinas

Background

This gene encodes 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. This protein is a type 3 transmembrane receptor for MGF (mast cell growth factor, also known as stem cell factor). Mutations in this gene are associated with gastrointestinal stromal tumors, mast cell disease, acute myelogenous leukemia, and piebaldism. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

matters needing attention

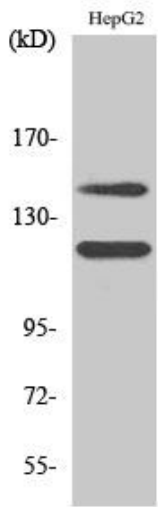
Avoid repeated freezing and thawing!

Usage suggestions

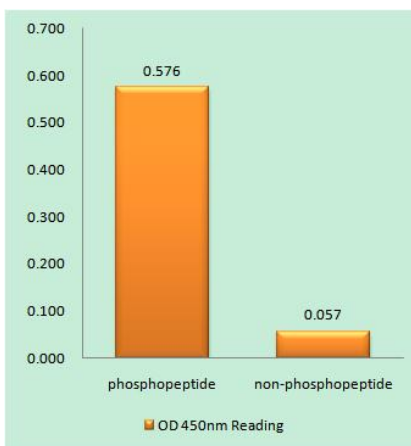
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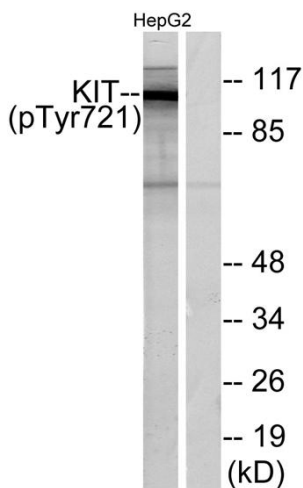
Products Images



Western Blot analysis of various cells using Phospho-c-Kit (Y721) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using c-Kit (Phospho-Tyr721) Antibody



Western blot analysis of lysates from HepG2 cells treated with EGF 200ng/ml 30', using c-Kit (Phospho-Tyr721) Antibody. The lane on the right is blocked with the phospho peptide.