

#### Summary

o Tyr721) Rabbit Polyclonal Antibody
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e,Rat

#### Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storago	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
Storage	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

## Immunogen

Gene Name	KIT
Alternative Names	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
Gene ID	3815.0
SwissProt ID	P10721.The antiserum was produced against synthesized peptide derived from human
	c-Kit around the phosphorylation site of Tyr721. AA range:688-737

# Application

<b>Dilution Ratio</b>	WB 1:500-1:2000, ELISA 1:10000.Not yet tested in other applications.
Molecular Weight	110kDa

## 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 lukemia, and piebaldism. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008], catalytic activity: ATP + a [protein]-L-tyrosine = ADP + a [protein]-Ltyrosine 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 kinase superfamily. Tyr protein kinase family., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily, similarity: Contains 1 protein kinase domain., similarity: Contains 5 Ig-like C2-type (immunoglobulin-like) domains., subunit: Interacts with APS. Interacts with MPDZ (via the tenth PDZ domain). Interacts with PTPRU.,

## **Research Area**

Cytokine-cytokine receptor interaction;Endocytosis;Hematopoietic cell lineage;Melanogenesis;Pathways in cancer;Acute myeloid leukemia;

## Image Data



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.



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

#### Note

For research use only.