

## c-Kit (phospho Tyr721) Polyclonal Antibody

Catalog No: YP0066

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;ELISA

Target: c-Kit/CD117

**Fields:** >>MAPK signaling pathway;>>Ras signaling pathway;>>Rap1 signaling

pathway;>>Phospholipase D signaling pathway;>>PI3K-Akt signaling pathway;>>Hematopoietic cell lineage;>>Melanogenesis;>>Pathways in

cancer;>>Acute myeloid leukemia;>>Breast cancer;>>Central carbon metabolism

in cancer

P10721

P05532

Gene Name: KIT

Protein Name: Mast/stem cell growth factor receptor Kit

Human Gene Id: 3815

**Human Swiss Prot** 

No:

Mouse Gene Id: 16590

**Mouse Swiss Prot** 

No:

**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

**Dilution:** WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

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**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration**: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 110kD

**Cell Pathway:** Cytokine-cytokine receptor interaction; Endocytosis; Hematopoietic cell

lineage; Melanogenesis; Pathways in cancer; Acute myeloid leukemia;

**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],

**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

Subcellular Location:

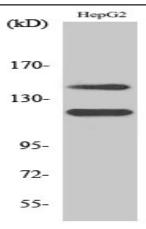
[Isoform 1]: Cell membrane; Single-pass type I membrane protein.; [Isoform 2]: Cell membrane; Single-pass type I membrane protein.; [Isoform 3]: Cytoplasm. Detected in the cytoplasm of spermatozoa, especially in the equatorial and

subacrosomal region of the sperm head. .

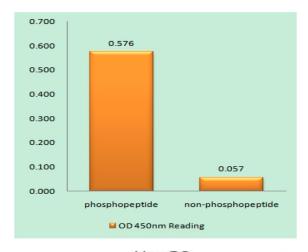
**Expression:** [Isoform 3]: In testis, detected in spermatogonia in the basal layer and in

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).

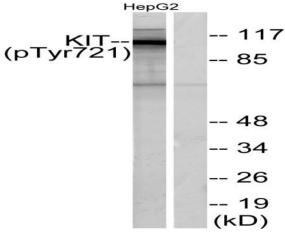
## Products Images



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.