KITLG Polyclonal Antibody

Catalog No: #42231

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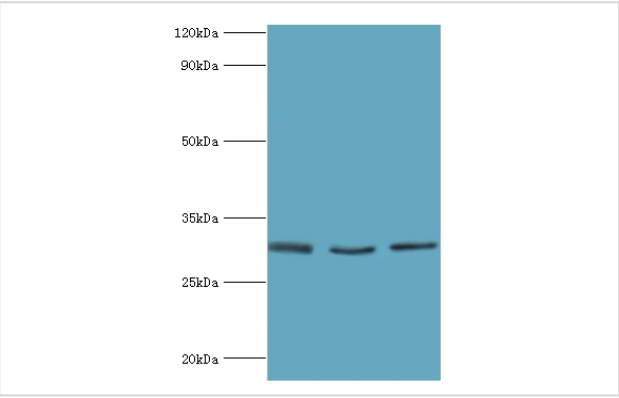
Description

Product Name	KITLG Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antigen Affinity Purified
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total KITLG polyclonal antibody.
Immunogen Type	protein
Immunogen Description	Recombinant human Kit ligand protein (26-214aa)
Target Name	KITLG
Other Names	Mast cell growth factor, MGF, Stem cell factor, SCF, c-Kit ligand, sKITLG, KITLG, MGF, SCF
Accession No.	Swiss-Prot#: P21583
Uniprot	P21583
GeneID	4254;
Calculated MW	31kd
Concentration	1.0mg/mL
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage	Store at -20°C

Application Details

Western blotting: 1:500 - 1:2000

Images



All lanes:Kit ligand antibody at 4ug/ml
Lane 1:HepG2 whole cell lysate
Lane 2:jurkat whole cell lysate
Lane 3:Hela whole cell lysate
secondary
Goat polyclonal to rabbit at 1/10000 dilution
predicted band size :31kDa
observed band size :31kDa

Background

Ligand for the receptor-type protein-tyrosine kinase KIT. 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. KITLG/SCF binding can activate several

signaling pathways. Promotes phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, and subsequent activation of the kinase AKT1. KITLG/SCF and KIT also transmit signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. KITLG/SCF and KIT promote activation of STAT family members STAT1, STAT3 and STAT5. KITLG/SCF and KIT promote activation of PLCG1, leading to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KITLG/SCF acts synergistically with other cytokines, probably interleukins.

References

[1]"Gain-of-function mutation of KIT ligand on melanin synthesis causes familial progressive hyperpigmentation."Wang Z.-Q., Si L., Tang Q., Lin D., Fu Z., Zhang J., Cui B., Zhu Y., Kong X., Deng M., Xia Y., Xu H., Le W., Hu L., Kong X.Am. J. Hum. Genet. 84:672-677(2009). [2]"Structural basis for activation of the receptor tyrosine kinase KIT by stem cell factor." Yuzawa S., Opatowsky Y., Zhang Z., Mandiyan V., Lax I., Schlessinger J.Cell 130:323-334(2007). [3]"Gain-of-function mutation of KIT ligand on melanin synthesis causes familial progressive hyperpigmentation."Wang Z.-Q., Si L., Tang Q., Lin D., Fu Z., Zhang J., Cui B., Zhu Y., Kong X., Deng M., Xia Y., Xu H., Le W., Hu L., Kong X.Am. J. Hum. Genet. 84:672-677(2009).

Note: This product is for in vitro research use only