

# KITLG Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21252b

## **Specification**

# KITLG Antibody (C-term) - Product Information

Application WB,E
Primary Accession P21583
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 30899

# KITLG Antibody (C-term) - Additional Information

#### **Gene ID 4254**

#### **Other Names**

Kit ligand, Mast cell growth factor, MGF, Stem cell factor, SCF, c-Kit ligand, Soluble KIT ligand, sKITLG, KITLG, MGF, SCF

# **Target/Specificity**

This KITLG antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 201-234 amino acids from the C-terminal region of human KITLG.

#### **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

# **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

KITLG Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# KITLG Antibody (C-term) - Protein Information

Name KITLG (HGNC:6343)

Synonyms MGF, SCF





Tel: 858.875.1900 Fax: 858.875.1999

**Function** 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.

#### **Cellular Location**

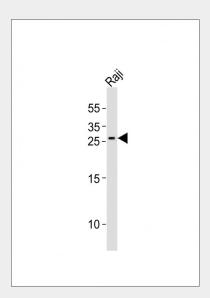
[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Soluble KIT ligand]: Secreted.

## KITLG Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

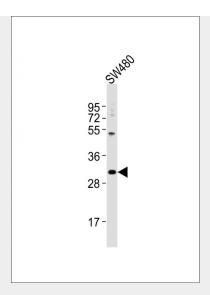
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## KITLG Antibody (C-term) - Images



Anti-KITLG Antibody (C-term)at 1:1000 dilution + Raji whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Anti-KITLG Antibody (C-term)at 1:2000 dilution + SW480 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# KITLG Antibody (C-term) - 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.

## KITLG Antibody (C-term) - References

Martin F.H.,et al.Cell 63:203-211(1990). Anderson D.M.,et al.Cell Growth Differ. 2:373-378(1991). Blair H.C.,et al.Biochem. Biophys. Res. Commun. 255:778-784(1999). Han C.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004).