10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SCF (KITLG) Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP1484c

Specification

SCF (KITLG) Antibody (Center) Blocking peptide - Product Information

Primary Accession P21583

SCF (KITLG) Antibody (Center) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP1484c was selected from the Center region of human KITLG. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SCF (KITLG) Antibody (Center) Blocking peptide - Protein Information

Name KITLG (HGNC:6343)

Synonyms MGF, SCF

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.

SCF (KITLG) Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

SCF (KITLG) Antibody (Center) Blocking peptide - Images

SCF (KITLG) Antibody (Center) Blocking peptide - Background

KITLG is the ligand of the tyrosine-kinase receptor. This ligand is a pleiotropic factor that acts in utero in germ cell and neural cell development, and hematopoiesis, all believed to reflect a role in cell migration. In adults, it functions pleiotropically, while mostly noted for its continued requirement in hematopoiesis.

SCF (KITLG) Antibody (Center) Blocking peptide - References

Young,S.M., Cell. Signal. 19 (12), 2572-2581 (2007)Pick,M., Stem Cells 25 (9), 2206-2214 (2007)Yasuda,A., Dig. Dis. Sci. 52 (9), 2292-2300 (2007)