

KITLG Blocking Peptide (C-term)

Synthetic peptide Catalog # BP21252b

Specification

KITLG Blocking Peptide (C-term) - Product Information

Primary Accession

P21583

KITLG Blocking Peptide (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

The synthetic peptide sequence is selected from aa 201-214 of HUMAN KITLG

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.

KITLG Blocking Peptide (C-term) - 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.

KITLG Blocking Peptide (C-term) - Protocols

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

• Blocking Peptides

KITLG Blocking Peptide (C-term) - Images

KITLG Blocking Peptide (C-term) - Background

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KITLG Blocking Peptide (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).