

Recombinant Human Kit ligand(KITLG),partial

Catalog No: #AP70472

Package Size: #AP70472-1 20ug #AP70472-2 100ug #AP70472-3 1mg

Description

Product Name	Recombinant Human Kit ligand(KITLG),partial
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:26-189aaSequence Info:Partial
Other Names	Mast cell growth factor ;MGFStem cell factor ;SCFc-Kit ligand
Accession No.	P21583
Calculated MW	45.5 kDa
Tag Info	N-terminal GST-tagged
Target Sequence	EGICRNRVTNNVKDVTKLVANLPKDYMITLKYVPGMDVLPSCWCWISSEMVVQLSDSLTDLLDKFSNISEGLSNYS IIDKLVNIVDDLVECVKENSCKDLKKSFKSPEPRLFTPEEFFRIFNRSIDAFKDFVVAETSDCVVSSTLSPEKDS RVSVTKPFMLPPVA
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

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

The full-ORF clone resource of the German cDNA consortium.Bechtel S., Rosenfelder H., Duda A., Schmidt C.P., Ernst U., Wellenreuther R., Mehrle A., Schuster C., Bahr A., Bloeker H., Heubner D., Hoerlein A., Michel G., Wedler H., Koehrer K., Ottenwaelder B., Poustka A., Wiemann S., Schupp I.BMC Genomics 8:399-399(2007)Research Topic:Developmental Biology

Note: This product is for in vitro research use only and is not intended for use in humans or animals.