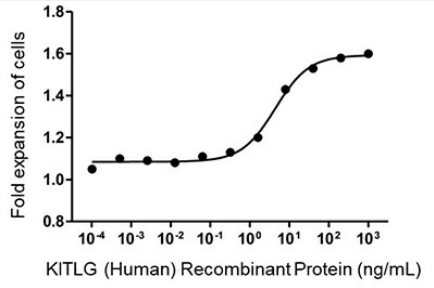
Bioactive

KITLG (Human) Recombinant Protein

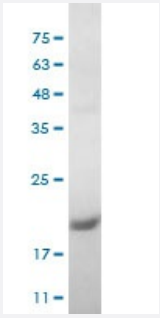
Catalog # P7012 Size 100 ug

Applications



Functional Study

The ED_{50} for this effect is <5 ng/mL, measured by the induction of TF-1 cells proliferation.



Specification

Product Description	Human KITLG recombinant protein with polyhistidine tag at the C-terminus expressed in *Escherichia coli*.
Sequence	MEGICRNRVTNNVKDVTKLVANLPKDYMITLKYVPGMDVLPSHCWISEMVVQLSDSLTDLLDKFS NISEGLSNYSIIDKLVNIVDDLVECVKENSSKDLKKSFKSPEPRLFTPEEFFRIFNRSIDAFKDFVVA SETSDCVVSSTLSPEKDSRVSVTKPFMLPPVA
Host	Escherichia coli
Form	Lyophilized
Preparation Method	*Escherichia coli* expression system

Purification	Ni-NTA chromatography
Purity	> 98% by SDS-PAGE
Endotoxin Level	< 0.1 EU per 1 ug of the protein by the LAL method.
Activity	Measured by the induction of TF-1 cells proliferation. The ED 50 for this effect is < 5 ng/mL. The specific activity of recombinant human SCF is > 5 x 10^5 IU/mg.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Recommend Usage	SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from PBS, pH 7.4.
Storage Instruction	Store at -20°C, lyophilized protein is stable for 1 year. After reconstitution with deionized water, store at -20 to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study

  The ED_{50} for this effect is <5 ng/mL, measured by the induction of TF-1 cells proliferation.

- SDS-PAGE

Gene Info — KITLG

Entrez GeneID	4254
Gene Name	KITLG
Gene Alias	DKFZp686F2250, KL-1, Kitl, MGF, SCF, SF, SHEP7
Gene Description	KIT ligand
Omim ID	184745
Gene Ontology	Hyperlink

Gene Summary	This gene encodes the ligand of the tyrosine-kinase receptor encoded by the KIT locus. 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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	mast cell growth factor|steel factor|stem cell factor

Pathway

- Cytokine-cytokine receptor interaction
- Hematopoietic cell lineage
- Melanogenesis
- Pathways in cancer

Disease

- Asthma
- Breast cancer
- Breast Neoplasms
- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Infertility
- Neoplasms
- Testicular Neoplasms
- Vitiligo