For Research Use Only

Recombinant Mouse SCF protein (His Tag)



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Catalog Number: Eg0402

Basic Information

Species: Mouse EC50:

2-8 ng/mL

Purity: >95 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >95 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µg protein, LAL method

HEK293-derived Mouse SCF protein Lys26-Ala189 (Accession# P20826-1) with a His tag at the C-terminus.

17311

Accession:

P20826-1

Predicted Molecular Mass:

22.3 kDa

SDS-PAGE:

25-35 kDa, reducing (R) conditions

Formulation

Lyophilized from 0.22 $\,\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Mouse CD117 (His tag) at 1 $\,\mu$ g/mL (100 $\,\mu$ L/well) can bind Mouse SCF (His tag) with a linear range of 2-8 ng/mL.

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20°C to -80°C as lyophilized proteins.
3 months, -20°C to -80°C under sterile conditions after reconstitution.

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

SCF(Stem cell factor) also known as mast cell growth factorang kit ligand, is a hematopoietic growth factor. It plays an role in hematopoiesis (formation of blood cells), spermatogenesis, and melanogenesis. SCF is expressed in where hematopoiesis takes place, such as the fetal liver and bone marrow. SCF binding to c-kit ligand(CD117)causes the receptor to homodimerize and auto-phosphorylate at tyrosine residues. SCF and c-kit ligand are up-regulated in human malignancies including gastrointestinal stromal tumor, breast cancer, hematopoietic cell, myeloid leukaemia, and glioma. The SCF/c-kit pathway also plays a rolein the regulation of cell survival and proliferation, stem cell maintenance, mast cell development, migration.SCF and c-kit were confirmed as key role in hematopoietic function in adult mice.

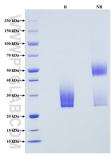
References

1.M Ogawa. et al. (1991) J Exp Med. 174(1): 63-71. 2.Gu Y. et al. (2011) PLoS One. 6(10): e25984. 3.Pedersen M. et al. (2008) Biochem Biophys Res Commun. 377(1): 98-103. 4.Talaiezadeh A. et al. (2012) Contemp Oncol (Pozn). 16(4): 306-9. 5.Bai CG. et al. (2012) World J Gastroenterol. 18(23): 2929-37. 6.Lennartsson J. et al. (2012) Physiol Rev. 92(4): 1619-49. 7. Liang J. et al.(2013) Int J Biol Sci. 9(5): 435-43.

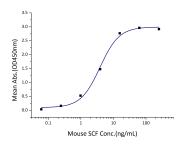
Synonyms

Kitl, SCF, kit ligand

Selected Validation Data



Purity of Recombinant Mouse SCF was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



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