Human SCG2 / Secretogranin II Protein (His Tag)

Catalog Number: 13441-H08H



General Information

Gene Name Synonym:

CHGC; EM66; SgII; SN

Protein Construction:

A DNA sequence encoding the human SCG2 (AAH22509.1) (Met1-Met617) was expressed with a C-terminal polyhistidine tag.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Pro 17

Molecular Mass:

The recombinant human SCG2 comprises 612 amino acids and has a predicted molecular mass of 70.5 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

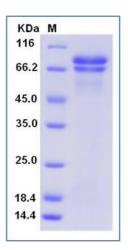
Store it under sterile conditions at -20° C to -80° C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Kit ligand, also known as Hematopoietic growth factor KL, Mast cell growth factor, Steel factor, Stem cell factor, c-Kit ligand, Kitlg and KITL, is a single-pass type I membrane protein which belongs to the SCF family. KITL / kit ligand also belongs to the family of dimeric transmembrane growth factors. The soluble form of KIT ligand is a secreted protein. Mast cells are thought to participate in a variety of immune responses, such as parasite resistance and the allergic reaction. Mast cell development depends on stem cell factor (Kit ligand) and its receptor, c-Kit. KITL / kit ligand stimulates the proliferation of mast cells. KITL / kit ligand is able to augment the proliferation of both myeloid and lymphoid hematopoietic progenitors in bone marrow culture. Efficient cell surface presentation of KITL / kit ligand is essential for the migration, proliferation, and survival of melanocytes, germ cells, hemopoietic stem cells, and mastocytes. KITL / kit ligand acts synergistically with other cytokines, probably interleukins. KITL / kit ligand plays a crucial role in the development and maintenance of the melanocyte lineage in adult skin. It exerts permanent survival, proliferation and migration functions in Kit receptor-expressing melanocytes. KITL / kit ligand misexpression in some hyperpigmented lesions may open the avenue for Kitl-dependent treatment of pathological skin conditions.

References

Nishida, K. et al., 2002, Blood. 99 (5):1866-9.
Paulhe, F. et al., 2004, J Biol Chem. 279 (53):55545-55.
Fernandez, S.M. et al., 2008, Biol Reprod. 79 (2):318-27.