For Research Use Only

Recombinant Human SPINT1 protein (rFc Tag) (HPLC verified)



Catalog Number: Eg3131

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE
>90 %, SEC-HPLC

Technical Specifications

Purity: >90 %, SDS-PAGE
 >90 %, SEC-HPLC

Endotoxin Level:

<0.1 EU/ µg protein, LAL method

HEK293-derived Human SPINT1 protein Ala35-Glu465 (Accession# O43278-1) with a rabbit IgG Fc tag at the Cterminus.

GeneID: 6692

Accession: 043278-1

Predicted Molecular Mass:

73.8 kDa SDS-PAGE

70-80 kDa, reducing (R) conditions

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

Not tested

Storage and Shipping

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

Reconstitution

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

Background

SPINT1, or Serine Peptidase Inhibitor, Kunitz Type 1, is a protein encoded by the SPINT1 gene in humans. SPINT1 functions as a potent inhibitor specific for HGF activator and is thought to be involved in the regulation of the proteolytic activation of HGF in injured tissues. It has been shown to modulate HGF/MET activation in certain cancer types, suggesting its role in tumor biology (PMID: 29532159). Furthermore, SPINT1 has been implicated in glucose homeostasis and insulin production. Studies have shown that SPINT1 disruption in mouse pancreas leads to glucose intolerance and impaired insulin production, involving the HEPSIN/MAFA signaling pathway (PMID: 39627229).

References

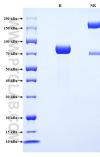
1. Liu CL. et al. (2018). Histochem Cell Biol. 149(6):635-644.

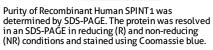
2. Lin HH. et al. (2024). Nat Commun. 15(1):10537.

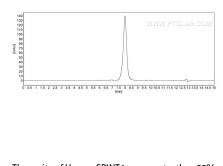
Synonyms

HAI 1, HAI-1, HAI, HAI1, Kunitz-type protease inhibitor 1

Selected Validation Data







The purity of Human SPINT1 was greater than 90% as determined by SEC-HPLC.