

For Research Use Only

Recombinant Mouse CHIT1 protein (rFc Tag) (HPLC verified)



Catalog Number: Eg2808

Basic Information

Species:
Mouse

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

Tag:
rFc Tag

Technical Specifications

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

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Mouse CHIT1 protein Ala22-Ser464 (Accession# Q9D7Q1-1) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
71884

Accession:
Q9D7Q1-1

Predicted Molecular Mass:
74.9 kDa

SDS-PAGE:
68-75 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm 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

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.

Shipping:

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

CHIT1 (Chitinase 1) is a chitinase, a member of the 18-glycosylase family (GH18), that has been implicated in the pathology of a variety of lung diseases. CHIT1 cleaves chitin polymers and plays a role in digestion and absorption, as well as the innate immune system. CHIT1-positive microglial cells are specifically present in the spinal cord of aging primates and can be paracrine through the CHIT1 activates SMAD signaling in motor neurons, which in turn drives motor neuron senescence, and the concentration of CHIT1 in cerebrospinal fluid (CSF) at diagnosis is a reliable predictor of faster disability progression in multiple sclerosis (MS) patients.

References

1. Sun S, et al. Nature. 2023;624(7992):611-620.
2. Beliën J, et al. Nat Commun. 2024;15(1):5013.
3. Dymek B, et al. J Inflamm Res. 2022;15:5621-5634.
4. Sklepikiewicz P, et al. Eur J Pharmacol. 2022;919:174792.

Synonyms

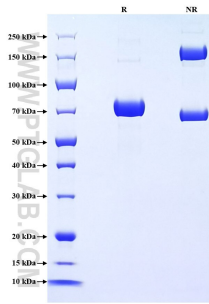
Chitinase-1, Chitotriosidase-1, EC:3.2.1.14

For technical support and original validation data for this product please contact

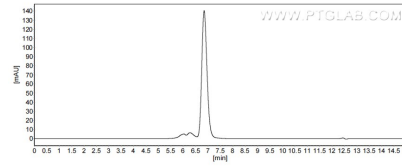
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data



Purity of Recombinant Mouse CHIT1 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.



The purity of Mouse CHIT1 was greater than 90% as determined by SEC-HPLC.