

Recombinant Mouse CHIL3 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51163

Size: 10ug, 100ug

Protein Name: Chitinase-like protein 3 (EC 3.2.1.52) (Beta-N-acetylhexosaminidase Ym1) (Chitinase-3-like protein 3) (ECF-L) (Eosinophil chemotactic cytokine) (Secreted protein Ym1)

Synonym: Chil3, Chi3l3, Ym1

UniProt ID: O35744

UniProt Link: www.uniprot.org/uniprotkb/O35744/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 398 AA

Molecular Weight: 44 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAKLILVTGLAILLNVQLGSSSYQLMCYYTSWAKDRPIEGSFKPGNIDPCLCTHLIYAFAGMQNNEITYT
HEQDLRDYEALNGLKDKNTELKTLLAIGGWKFGPAPFSAMVSTPQNRQIFIQSVIRFLRQYNFDGLNL
DWQYPGSRGSPPKDKHLFSVLVKEMRKAEEEEVEKDIPRLLLTSTGAGIIDVIKSGYKIPELSQSLDY
IQVMTYDLHDPKDGTYGENSPYLYKSPYDIGKSADLNVDISIYWKDHGAASEKLIVGFPAVGHTFILSD
PSKTGIGAPTISTGPPGKYTDESGLLAYEVCFTFLNEGATEVWDAPQEVPIYAYQGNEWVGYDNVRS
FKLKAQWLKDNNLGGAVVWPLDMDDFSGSFCHQRHFPLTSTLKGDLNIHSASCKGPY

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Chitinase-like protein 3 (EC 3.2.1.52) (Beta-N-acetylhexosaminidase Ym1) (Chitinase-3-like protein 3) (ECF-L) (Eosinophil chemotactic cytokine) (Secreted protein Ym1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Lectin that binds saccharides with a free amino group, such as glucosamine or galactosamine. Binding to oligomeric saccharides is much stronger than binding to mono- or disaccharides. Also binds chitin and heparin. Has weak hexosaminidase activity but no chitinase activity. Has chemotactic activity for T-lymphocytes, bone marrow cells and eosinophils. May play a role in inflammation and allergy.

Subcellular Localization: Secreted. Rough endoplasmic reticulum lumen. Nucleus envelope. Cytoplasm. Cytoplasmic granule. Note=Predominantly localizes to the lumen of rough endoplasmic reticulum (rER) and nuclear envelope in alveolar macrophages. Localizes to the dilated lumen of rER in immature neutrophils in spleen and in cytoplasmic granules in peritoneal neutrophils. Detected in needle-shaped crystals present in the cytoplasm of bone marrow macrophages.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.