

Recombinant Human CHI3L1 / Chitinase 3 Like 1,

Animal Free & Carrier Free

Cat #: C-CYP362

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

Chitinase-3-like protein 1 (CHI3L1), also known as YKL-40, is a secreted glycoprotein that is approximately 40kDa in size that in humans is encoded by the CHI3L1 gene. Elevated levels of CHI3L1 are associated with disorders exhibiting increased connective tissue turnover, such as rheumatoid, arthritis, osteoarthritis, scleroderma, and cirrhosis of liver, but is produced in cartilage from old donors or patients with osteoarthritis. CHI3L1 is abnormally expressed in the hippocampus of subjects with schizophrenia and may be involved in the cellular response to various environmental events that are reported to increase the risk of schizophrenia.

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

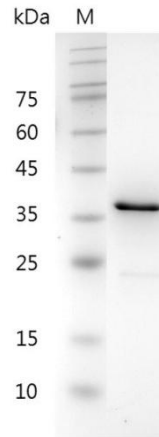
Endotoxin: <0.1EU per 1µg of the protein by the LAL method.

Amino acid sequence:

MYKLVCYYTSWSQYREGDGSCFPDALDRFLCTHIIYSFANISNDHIDTWEWNTLYGMLNLTKNRNPNLKTLSSVGGWNFGSQRFSKIASN
TQSRRTFIKSVPPFLRTHGFDGLDLAWLYPGRRDQHFHTTLIKEMKAEFIKEAQP GKQQLLSAALSAGKVTIDSSYDIAKISQHLDFISIMTY
DFHGAWRGTTGHHSPLFRGQEDASPD RFSNTDYAVGYMLRLGAPASKLVMGIPTFGRSFTLASSETGVGAPISGPGIPGRFTKEAGTLAYY
EICDFLRGATVHRILGQQVPYATKGNQWVG YDDQESVSKVQYLKDRQLAGAMVWALDLD DDFQGSFCGQDLRFPLTNAIKDALAAT

with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 7.4.



SDS-PAGE analysis of recombinant human CHI3L1

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.