

Rat CHI3L1 protein, His tag (active)

Cat. No. GTX00364-pro

Applications Functional Assay**Species** Rat**Package**

10 µg

Applications

Application Note

Glycoprotein 39, Cartilage (GP39) also known as Chitinase-3-like protein 1 (CHI3L1), YKL-40 is a secreted glycoprotein that is approximately 40kDa in size that in humans is encoded by the CHI3L1 gene. GP39 may play a role in tissue remodeling and in the capacity of cells to respond to and cope with changes in their environment. Plays a role in T-helper cell type 2 (Th2) inflammatory response and IL-13-induced inflammation, regulating allergen sensitization, inflammatory cell apoptosis, dendritic cell accumulation and M2 macrophage differentiation. Facilitates invasion of pathogenic enteric bacteria into colonic mucosa and lymphoid organs. To test the effect of GP39 on cell proliferation, rat spleen cells were seeded into triplicate wells of 96-well plates at a density of 5000 cells/well with 2% serum standard RPMI-1640 including various concentrations of recombinant rat GP39. After incubated for 96h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of spleen cells after incubation with GP39 for 96h observed by inverted microscope.

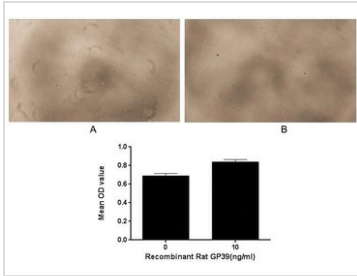
Observed MW (kDa) 29 kDa.

Properties

Form Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Tyr117~Lys364 (NP_001296749.1)**Expression System** E. coli**Purity** > 95%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

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DATA IMAGES

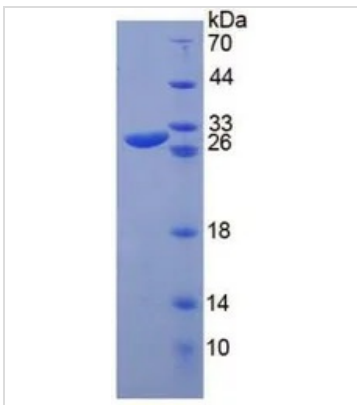


GTX00364-pro Functional Assay Image

Cell proliferation effect of GTX00364-pro Rat CHI3L1 protein (active). Cell viability was measured by Cell Counting Kit-8 (CCK-8).

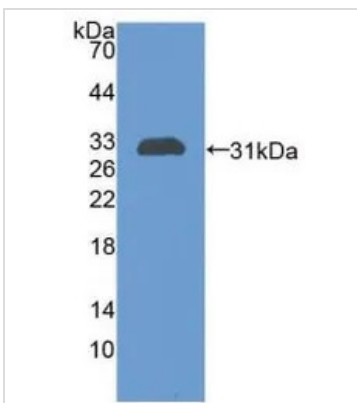
(A) Unstimulated rat spleen cells cultured in RPMI-1640 for 96hrs.

(B) Rat spleen cells cultured in RPMI-1640 stimulated with 10 ng/ml GP39 for 96hrs.



GTX00364-pro Image

SDS-PAGE analysis of GTX00364-pro Rat CHI3L1 protein (active).



GTX00364-pro Image

WB analysis of GTX00364-pro Rat CHI3L1 protein (active).



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