

DESCRIPTION

Source Mouse myeloma cell line, NS0-derived mouse Chondroadherin protein Ala21-Thr349, with a C-terminal 6-His tag
Accession # O55226

N-terminal Sequence Analysis No results obtained. Protein identity confirmed via Mass Spectrometry.

Predicted Molecular Mass 38 kDa

SPECIFICATIONS

SDS-PAGE 33-38 kDa, reducing conditions

Activity Measured by its ability to induce adhesion of ATDC5 mouse chondrogenic cells.
The ED₅₀ for this effect is 0.08-048 µg/mL

Endotoxin Level <0.10 EU per 1 µg of the protein by the LAL method.

Purity >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

Formulation Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

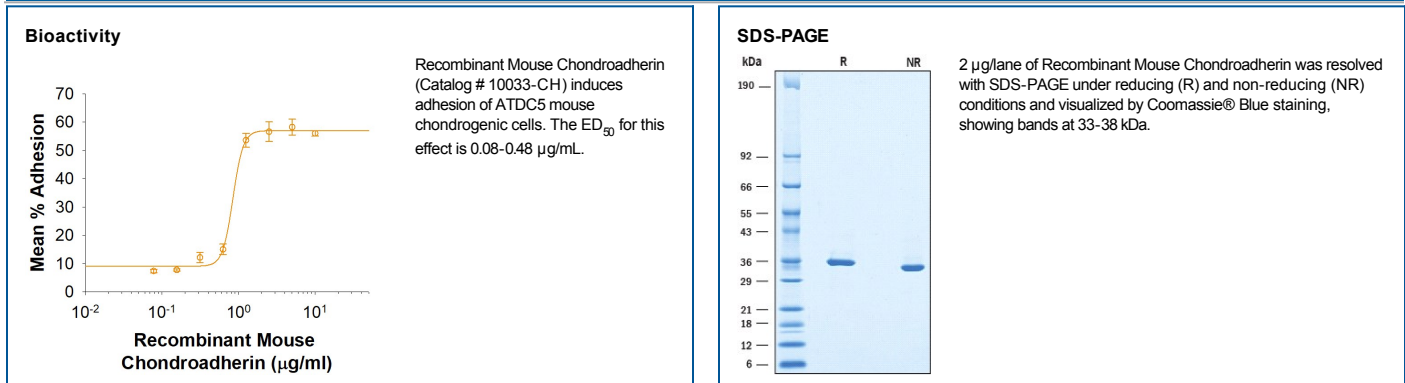
Reconstitution Reconstitute at 500 µg/mL in PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage

- 12 months from date of receipt, ≤ -20 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, ≤ -20 °C under sterile conditions after reconstitution.

DATA



BACKGROUND

Chondroadherin (CHAD), also known as SLRR4A, is a 38 kDa secreted protein belonging to the small leucine-rich proteoglycans (SLRPs) that help regulate the assembly and function of the extracellular matrix (ECM) (1). CHAD is highly expressed in cartilaginous tissues, with lower expression levels found in bone, tendon, and eye (2-4). Mature mouse CHAD is a 338 amino acid (aa) protein that contains twelve leucine-rich repeats (LRRs) including ten tandem leucine-rich repeats as well as N-terminal and C-terminal leucine-rich domains flanked by cysteine-rich regions. CHAD interacts with collagen II and mediates signaling between chondrocytes and the ECM by binding to the α2β1 integrin, heparan sulphate, and to cell surface proteoglycans like syndecans (5-9). In addition, CHAD also interacts with both N- and C-terminal globular domains of type VI collagen (10). Mouse CHAD shares 95% and 98% aa sequence identity with human and rat CHAD, respectively.

References:

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