

Active Recombinant Mouse Chad Protein, His tagged

Cat. No. CHAD-3363M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse Chad Protein (Ala21-Thr349) with a C-terminal 6-His tag was expressed in Mouse myeloma cell line, NS0.
Species	Mouse
Source	Mouse myeloma cell line
ProteinLength	21-349 aa
Description	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). CHAD is highly expressed in cartilaginous tissues, with lower expression levels found in bone, tendon, and eye. 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 alpha 2 beta 1 integrin, heparan sulphate, and to cell surface proteoglycans like syndecans. In addition, CHAD also interacts with both N- and C-terminal globular domains of type VI collagen. Mouse CHAD shares 95% and 98% aa sequence identity with human and rat CHAD, respectively.
Form	Lyophilized from a 0.2 µm filtered solution in PBS.
Bio-activity	Measured by its ability to induce adhesion of ATDC5 mouse chondrogenic cells. The

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	ED50 for this effect is 0.08-048 µg/mL
Molecular Mass	38 kDa
Endotoxin	< 0.10 EU/µg of the protein by the LAL method.
Purity	> 95% by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie Blue Staining.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, ≤ -20 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, ≤ -20 centigrade under sterile conditions after reconstitution.
Shipping	The product is shipped at ambient temperature.
Reconstitution	Reconstitute at 500 µg/mL in PBS.
N-terminal Sequence Analysis	No results obtained. Protein identity confirmed via Mass Spectrometry.
Reference	1. Neame, P.J. et al. (1994) J. Biol. Chem. 269:21547. 2. Larson, T. et al. (1991) J. Biol. Chem. 266:20428. 3. Mizuno, M. et al. (1996) Calcif. Tissue Int. 59:163.

GENE INFORMATION

Gene Name	Chad chondroadherin [Mus musculus]
Official Symbol	Chad
Synonyms	CHAD; chondroadherin; cartilage leucine-rich protein; SLRR4A;

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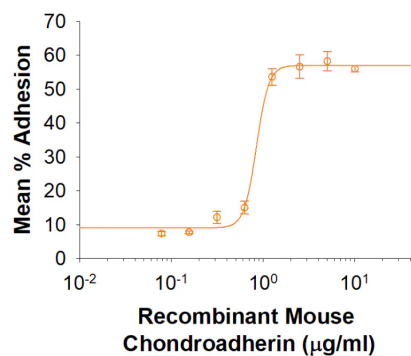
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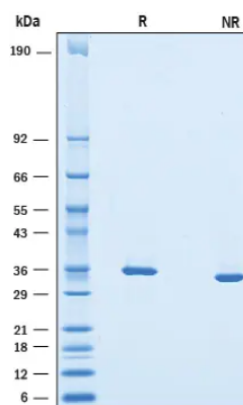
Protein Refseq NP_031715

UniProt ID O55226

Activity



SDS-PAGE



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