

Recombinant human HAPLN1 protein

Catalog Number: ATGP4121

PRODUCT INFORMATION

Expression system

HEK293

Domain

16-354aa

UniProt No.

P10915

NCBI Accession No.

NP_001875.1

Alternative Names

hyaluronan and proteoglycan link protein 1, CRT1, CRTL1, HPLN1, Cartilage-linking protein 1, Proteoglycan link protein

PRODUCT SPECIFICATION

Molecular Weight

39.3kDa (345aa)

Concentration

0.25mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured by its binding ability in a functional ELISA with Hyaluronic acid. The ED50 range \leq 1 ug/ml.

Tag

His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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Description

HAPLN1, also known as CRTL1, is a member of the hyaladherin family. This protein contains a common structural domain of about 100 amino acids that is termed a Link module with two α -helices and two antiparallel β -sheets. It involved in the formation and stability of extracellular matrix via its association with specific HA-binding proteins. It stabilizes the aggregates of proteoglycan monomers with hyaluronic acid in the extracellular cartilage matrix. Also, It has been shown to interact with Versican, two extracellular matrix components essential for cardiac development. Recombinant human HAPLN1, fused to His-tag at C-terminus, was expressed in HEK293 and purified by using conventional chromatography techniques.

Amino acid Sequence

DHLSDNYTLD HDRAIHQAE NGPHLLVEAE QAKVFSHRGG NVTLPCKFYR DPTAFGSGIH KIRIKWTKLT SDYLKEVDVF
VSMGYHKKTY GGYQGRVFLK GGSDDASLV ITDLTLEDYG RYKCEVIEGL EDDTVVVALD LQGVVFPYFP RLGRYNLNFH
EAQQAQLDQD AVIASFDQLY DAWRGGLDWC NAGWLSGDSV QYPITKPREP CGGQNTVPGV RNYGFWDKDK
SRYDVFCTFS NFNGRFYYLI HPTKLTYDEA VQACLNDGAQ IAKVGQIFAA WKILGYDRCD AGWLADGSVR YPISRPRRRC
SPTEAAVRV FFPDKKHKLY GVYCFRAYN<H HHHHH>

General References

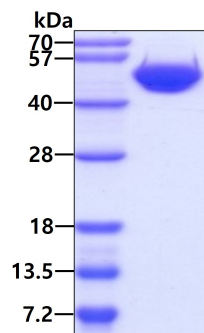
Zhang T., et al. (2022) Gastric Cancer. 25:346-359.

Sun J., et al. (2022) Circulation. 146:48-63.

Day, A.J. and G.D. Prestwich (2002) J. Biol. Chem. 277:4585-4588.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain