

Recombinant human Hyaluronidase 1/HYAL1 protein

Catalog Number: ATGP3941

PRODUCT INFORMATION

Expression system

HEK293

Domain

22-435aa

UniProt No.

Q12794

NCBI Accession No.

NP_149349

Alternative Names

Hyaluronidase-1, Hyal-1, Hyaluronoglucosaminidase-1, Lung carcinoma protein 1, LuCa-1, HYAL1, Hyaluronidase 1, Hyaluronoglucosaminidase 1, Hyaluronoglucosaminidase1, LUCA 1, MPS9, NAT6, Plasma hyaluronidase, Tumor suppressor LUCA 1

PRODUCT SPECIFICATION

Molecular Weight

46.9kDa (420aa)

Concentration

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

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol.

Purity

> 90% by SDS-PAGE

Endotoxin level

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

Tag

His-Tag

Application

SDS-PAGE

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

Description

HYAL1, also known as Hyaluronidase-1, is a member of the endolytic glycoside hydrolase family. Human hyaluronidases (HYALs) are a group of five endo- β -N-acetyl-hexosaminidases that include HYAL1, HYAL2, HYAL3,

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HYAL4, and SPAM1 (PH20). HYAL1 preferentially degrades hyaluronic acid present in the extracellular matrix of somatic tissues. This protein is active at an acidic pH and is the major hyaluronidase in plasma. Defects in HYAL1 are associated with mucopolysaccharidosis type IX, or hyaluronidase deficiency. It is implicated in several types of cancers, likely due to the angiogenic effects of HYAL1-cleaved hyaluronan fragments. Recombinant human HYAL1, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

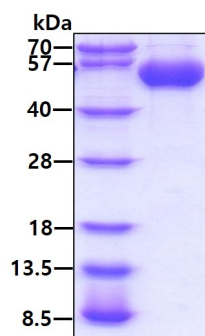
FRGPLLPNRP FTTVWNANTQ WCLERHGVDV DVSVFDVVAN PGQTRGPD M TIFYSSQLGT YPYTPTGEP VFGGLPQNAS
LIAHLARTFQ DILAAIPAPD FSLAVIDWE AWRPRWAFNW DTKDIYRQRS RALVQAQHPD WPAPQVEAVA QDQFQGAARA
WMAGTLQLGR ALRPRGLWGF YGFPDCYNYD FLSPNYTGQC PSGIRAQNDQ LGWLWGQSRALYPSIYMPAV
LEGTGKSQMY VQHRVAEAFR VAVAAGDPNL PVLPIYVQIFY DTTNHFLPLD ELEHSLGESA AQGAAGVVLW VSWENTRTKE
SCQAIKEYMD TTLGPFILNV TSGALLCSQA LCSGHGRCVR RTSHPKALLL LNPASFSIQL TPGGGPLSLR GALSLEDQAQ
MAVEFKCRCY PGWQAPWCER KSMW<HHHHHH>

General References

- Csoka, A.B. et al. (2001) *Matrix Biol.* 20:499-508.
Jedrzejewski, M. J. and Stern, R. (2005) *Proteins* 61:227-238.
Frost, G.I. et al. (1997) *Biochem. Biophys. Res. Commun.* 236:10-15.

DATA

SDS-PAGE



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