

Recombinant Human ARSB therapeutic protein(Galsulfase)

Cat. No. ARSB-P038H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Recombinant Human N-acetylgalactosamine 4-sulfatase is a variant form of the polymorphic human enzyme N-acetylgalactosamine 4-sulfatase of recombinant?DNA origin. It is a glycoprotein with a molecular weight of approximately 56 kD. The recombinant protein is comprised of 495 amino acids and contains six asparagine-linked glycosylation sites, four of which carry a bis mannose-6-phosphate manose7 oligosaccharide for specific cellular recognition. Post-translational modification of Cys53 produces the catalytic amino acid residue Ca-formylglycine, which is required for enzyme activity and is conserved in all members of the sulfatase enzyme family.

Species Human

ProteinLength 495 aa

Description

It is a lysosomal hydrolase that catalyzes the cleavage of the sulfate ester from terminal N-acetylgalactosamine 4-sulfate residues of GAG chondroitin 4-sulfate and dermatan sulfate. Increased catabolism of GAG in turn reduces systemic dermatan sulfate accumulation, thereby reducing the primary symptoms of MPS VI.

Molecular Mass 56 kDa

AA Sequence

SGAGASRPPHLVFLADDLGWNDVGFHGSRI RTPHLDALAAGGVLLDNYYTQPLCT
 PSRSQLLTGRYQIRT GLQHQIIWPCQPSCVPLDEKLLPQLLKEAGYTTHMVGKWHL
 GMYRKECLPTRRGFDTYFGYLLGSEDDYSH ERCTLIDALNVTRCALDFRDGEEVAT
 GYKNMYSTNIFTKRAIALITNHPPEKPLFLYLALQSVHEPLQVPE EYLKPYDFIQDKN

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

RHHYAGMVSLMDEAVGNVTAALKSSGLWNNTVFIFSTDNGGQTLAGGNNWPLRGR
 KWS LWEGGVRGVGFVASPLLKQKGVKNRELIHISDWLPTLVKLARGHTNGTKPLD
 GFDVWKTISEGSPSPRIEL LHNIDPNFVDSSPCPRNSMAPAKDDSSLPEYSAFNTSV
 HAAIRHGNWKLTTGYPGCGYWFPPPSQYN VSEIPSSDPPTKTLWLFDIDRDPEERH
 DLSREYPHIVTKLLSRLQFYHKHSVPVYFPAQDPRCDPKATGVW GPWM

Endotoxin < 0.1 EU per µg of the protein

Purity >95%

Alias ASB; G4S; MPS6; Galsulfase

GENE INFORMATION

Gene Name [ARSB arylsulfatase B \[Homo sapiens \]](#)

Official Symbol [ARSB](#)

Synonyms ASB; G4S; MPS6; arylsulfatase B

Gene ID [411](#)

mRNA Refseq [NM_000046](#)

Protein Refseq [NP_000037](#)

MIM [611542](#)

UniProt ID [P15848](#)

Chromosome 5q14.1

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



Location

Pathway

CS/DS degradation, organism-specific biosystem; Chondroitin sulfate degradation, conserved biosystem; Glycosaminoglycan degradation, organism-specific biosystem

Function

N-acetylgalactosamine-4-sulfatase activity; N-acetylgalactosamine-4-sulfatase activity; arylsulfatase activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA