

Arylsulfatase B Recombinant Protein | ARSB recombinant protein

Recombinant Human Arylsulfatase B

CATALOG # AAA113379	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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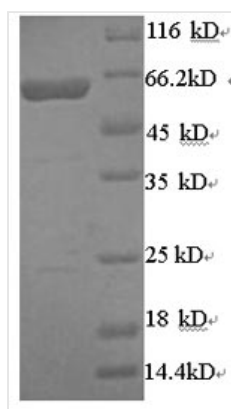
PRODUCT SYNONYMS

Arylsulfatase B; Recombinant Human Arylsulfatase B; N-acetylgalactosamine-4-sulfatase; G4S; ARSB recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	37-533aa; Full Length of Mature Protein
Sequence	SGAGASRPPH LVFLLADDLG WNDVGFHGSR IRTPHLDALA AGGVLLDNYY TQPLCTPSRS QLLTGRIYQIR TGLQHIIWP CQPSCVPLDE KLLPQLLKEA GYTTHMVGKW HLGMYRKECL PTRRGFDITYF GYLLGSEDYY SHERCTLIDA LNVTRCALDF RDGEEVATGY KNMYSTNIFT KRAIALITNH PPEKPLFLYL ALQSVHEPLQ VPEEYLKPYD FIQDKNRHHY AGMVSLMDEA VGNVTAALKS SGLWNNTVFI FSTDNGGQTL AGGNNWPLRG RKWSLWEGGV RGVGFVASPL LKQKGVKNRE LIHISDWLPT LVKLARGHTN GTKPLDGFVDV WKTISEGSPS PRIELLHNID PNFVDSSPCP RNSMAPAKDD SSLPEYSAFN TSVHAAIRHG NWKLLTGYPG CGYWFPPPSQ YNVSEIPSSD PPTKTLWLFD IDRDPEERHD LSREYPHIVT KLLSRLQFYH KHSVPVYFPA QDPRCDPKAT GVWGPWM
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for ARSB recombinant protein	Removes sulfate groups from chondroitin-4-sulfate (C4S) and regulates its degradation. Involved in the regulation of cell adhesion, cell migration and invasion in colonic epithelium. In the central nervous system, is a regulator of neurite outgrowth and neuronal plasticity, acting through the control of sulfate glycosaminoglycans and neurocan levels.
Product Categories/Family for ARSB recombinant protein	Cancer

References

- Phylogenetic conservation of arylsulfatases. cDNA cloning and expression of human arylsulfatase B. Peters C., Schmidt B., Rommerskirch W., Rupp K., Zuehlisdorf M., Vingron M., Meyer H.E., Pohlmann R., von Figura K.J. *Biol. Chem.* 265:3374-3381(1990)
- Human arylsulfatase B MOPAC cloning, nucleotide sequence of a full-length cDNA, and regions of amino acid identity with arylsulfatases A and C. Schuchman E.H., Jackson C.E., Desnick R.J. *Genomics* 6:149-158(1990)
- Structure of the human arylsulfatase B gene. Modaresi S., Rupp K., von Figura K., Peters C. *Biol. Chem. Hoppe-Seyler* 374:327-335(1993)
- Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R., Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S., Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M., Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Fujimori K., Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S., Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T., Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O., Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M., Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S., Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S., Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O., Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B., Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y., Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T., Ono T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y., Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M., Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T., Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K., Okumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashita R., Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S. *Nat. Genet.* 36:40-45(2004)
- The DNA sequence and comparative analysis of human chromosome 5. Schmutz J., Martin J., Terry A., Couronne O., Grimwood J., Lowry S., Gordon L.A., Scott D., Xie G., Huang W., Hellsten U., Tran-Gyamfi M., She X., Prabhakar S., Aerts A., Altherr M., Bajorek E., Black S., Branscomb E., Caoile C., Challacombe J.F., Chan Y.M., Denys M., Detter J.C., Escobar J., Flowers D., Fotopulos D., Glavina T., Gomez M., Gonzales E., Goodstein D., Grigoriev I., Groza M., Hammon N., Hawkins T., Haydu L., Israni S., Jett J., Kadner K., Kimball H., Kobayashi A., Lopez F., Lou Y., Martinez D., Medina C., Morgan J., Nandkeshwar R., Noonan J.P., Pitluck S., Pollard M., Predki P., Priest J., Ramirez L., Retterer J., Rodriguez A., Rogers S., Salamov A., Salazar A., Thayer N., Tice H., Tsai M., Ustaszewska A., Vo N., Wheeler J., Wu K., Yang J., Dickson M., Cheng J.-F., Eichler E.E., Olsen A., Pennacchio L.A., Rokhsar D.S., Richardson P., Lucas S.M., Myers R.M., Rubin E.M. *Nature* 431:268-274(2004)
- Mural R.J., Istrail S., Sutton G., Florea L., Halpern A.L., Mobarry C.M., Lippert R., Walenz B., Shatkay H., Dew I., Miller J.R., Flanigan M.J., Edwards N.J., Bolanos R., Fasulo D., Halldorsson B.V., Hannenhalli S., Turner R., Yooseph S., Lu F., Nusskern D.R., Shue B.C., Zheng X.H., Zhong F., Delcher A.L., Huson D.H., Kravitz S.A., Mouchard L., Reinert K., Remington K.A., Clark A.G., Waterman M.S., Eichler E.E., Adams M.D., Hunkapiller M.W., Myers E.W., Venter J.C. Human N-acetylgalactosamine-4-sulphatase protein maturation and isolation of genomic clones. Litjens T., Morris C.P., Gibson G.J., Beckmann K.R., Hopwood J.J. *Biochem. Int.* 24:209-215(1991)
- Components and proteolytic processing sites of arylsulfatase B from human placenta. Kobayashi T., Honke K., Jin T., Gasa S., Miyazaki T., Makita A. *Biochim. Biophys. Acta* 1159:243-247(1992)
- A novel amino acid modification in sulfatases that is defective in multiple sulfatase deficiency. Schmidt B., Selmer T., Ingendoh A., von Figura K. *Cell* 82:271-278(1995)
- Molecular and functional analysis of SUMF1 mutations in multiple sulfatase deficiency. Cosma M.P., Pepe S., Parenti G., Settembre C., Annunziata I., Wade-Martins R., Domenico C.D., Natale P.D., Mankad A., Cox B., Uziel G., Mancini G.M., Zammarchi E., Donati M.A., Kleijer W.J., Filocamo M., Carrozzo R., Carella M., Ballabio A. *Hum. Mutat.* 23:576-581(2004)
- Arylsulfatase B regulates colonic epithelial cell migration by effects on MMP9 expression and RhoA activation. Bhattacharyya S., Tobacman J.K. *Clin. Exp. Metastasis* 26:535-545(2009)
- Glycoproteomics analysis of human liver tissue by combination of multiple enzyme digestion and hydrazide chemistry. Chen R., Jiang X., Sun D., Han G., Wang F., Ye M., Wang L., Zou H.J. *Proteome Res.* 8:651-661(2009)
- Structure of a human lysosomal sulfatase. Bond C.S., Clements P.R., Ashby S.J., Collier C.A., Harrop S.J., Hopwood J.J., Guss J.M. *Structure* 5:277-289(1997)
- Mucopolysaccharidosis VI (Maroteaux-Lamy syndrome). An intermediate clinical phenotype caused by substitution of valine for glycine at position 137 of arylsulfatase B. Wicker G., Prill V., Brooks D.A., Gibson G.J., Hopwood J.J., von Figura K., Peters C.J. *Biol. Chem.* 266:21386-21391(1991)
- Mucopolysaccharidosis type VI identification of three mutations in the arylsulfatase B gene of patients with the severe and mild phenotypes provides molecular evidence for genetic heterogeneity. Jin W.-D., Jackson C.E., Desnick R.J., Schuchman E.H. *Am. J. Hum. Genet.* 50:795-800(1992)
- Mucopolysaccharidosis VI (Maroteaux-Lamy syndrome) six unique arylsulfatase B gene alleles causing variable disease phenotypes. Isbrandt D., Arlt G., Brooks D.A., Hopwood J.J., von Figura K., Peters C. *Am. J. Hum. Genet.* 54:454-463(1994)
- Four novel mutant alleles of the arylsulfatase B gene in two patients with intermediate form of mucopolysaccharidosis VI (Maroteaux-Lamy syndrome). Voskoboeva E., Isbrandt D., von Figura K., Krasnopolskaya X., Peters C. *Hum. Genet.* 93:259-264(1994)
- N-acetylgalactosamine-4-sulfatase identification of four new mutations within the conserved sulfatase region causing mucopolysaccharidosis type VI. Simonaro C.M., Schuchman E.H. *Biochim. Biophys. Acta* 1272:129-132(1995)
- Identification, expression, and biochemical characterization of N-acetylgalactosamine-4-sulfatase mutations and relationship with clinical phenotype in MPS6 patients. Litjens T., Brooks D.A., Peters C., Gibson G.J., Hopwood J.J. *Am. J. Hum. Genet.* 58:1127-1134(1996)
- Two novel mutations of the arylsulfatase B gene in two Italian patients with severe form of mucopolysaccharidosis. Villani G.R.D., Balzano N., Di Natale P. *3.0.CO;2-Hum. Mutat.* 11:410-410(1998)
- Large-scale identification, mapping, and genotyping of single-nucleotide polymorphisms in the human genome. Wang D.G., Fan J.-B., Siao C.-J., Bero A., Young P., Sapolsky R., Ghandour G., Perkins N., Winchester E., Spencer J., Kruglyak L., Stein L., Hsie L., Topaloglou T., Hubbell E., Robinson E., Mittmann M., Morris M.S., Shen N., Kilburn D., Rioux J., Nusbaum C., Rozen S., Hudson T.J.,

NCBI AND UNIPROT INFORMATION

NCBI GI #	38569405
NCBI GeneID	411
NCBI Accession #	NP_000037.2
NCBI GenBank Nucleotide #	NM_000046.3
UniProt Accession #	P15848; Q8N322; Q9UDI9; B2RC20
Molecular Weight	58 kDa
NCBI Official Full Name	arylsulfatase B isoform 1
NCBI Official Synonym Full Names	arylsulfatase B
NCBI Official Symbol	ARSB
NCBI Official Synonym Symbols	ASB; G4S; MPS6
NCBI Protein Information	arylsulfatase B
UniProt Protein Name	Arylsulfatase B
UniProt Gene Name	ARSB
UniProt Synonym Gene Names	ASB; G4S
UniProt Entry Name	ARSB_HUMAN

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