

Beta-1,4-galactosyltransferase 1 Recombinant Protein | B4GALT1 recombinant protein

Recombinant Bovine Beta-1,4-galactosyltransferase 1

CATALOG #
AAA113906

HOST
E Coli or Yeast or Baculovirus or Mammalian Cell

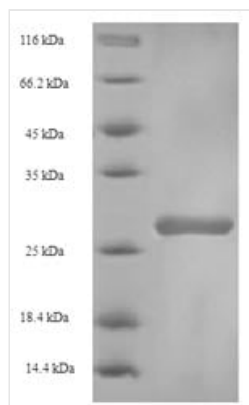
PRODUCT SYNONYMS

Beta-1; 4-galactosyltransferase 1; Recombinant Bovine Beta-1; UDP-Gal: beta-GlcNAc beta-1; B4GALT1 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	1-24aa; Cytoplasmic Domain
Sequence	MKFREPLLGG SAAMPGASLQ RACR
Sequence Length	24
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 B4GALT1 recombinant protein

The Golgi complex form catalyzes the production of lactose in the lactating mammary gland and could also be responsible for the synthesis of complex-type N-linked oligosaccharides in many glycoproteins as well as the carbohydrate moieties of glycolipids. The cell surface form functions as a recognition molecule during a variety of cell to cell and cell to matrix interactions, as those occurring during development and egg fertilization, by binding to specific oligosaccharide ligands on opposing cells or in the extracellular matrix.

References	Cloning of cDNA encoding the membrane-bound form of bovine beta 1,4-galactosyltransferase.D'Agostaro G., Bendiak B., Tropak M.Eur. J. Biochem. 183:211-217(1989) NIH - Mammalian Gene Collection (MGC) project Bovine galactosyltransferase identification of a clone by direct immunological screening of a cDNA expression library.Shaper N.L., Shaper J.H., Meuth J.L., Fox J.L., Chang H., Kirsch I.R., Hollis G.F.Proc. Natl. Acad. Sci. U.S.A. 83:1573-1577(1986) Cloning and sequencing of cDNA of bovine N-acetylglucosamine (beta 1-4) galactosyltransferase.Narimatsu H., Sinha S., Brew K., Okayama H., Qasba P.K.Proc. Natl. Acad. Sci. U.S.A. 83:4720-4724(1986) Qasba P.K., Narimatsu H., Masibay A.S.Expression of bovine beta-1,4-galactosyltransferase cDNA in COS-7 cells.Masibay A.S., Qasba P.K.Proc. Natl. Acad. Sci. U.S.A. 86:5733-5737(1989) Bovine beta 1-->4-galactosyltransferase two sets of mRNA transcripts encode two forms of the protein with different amino-terminal domains. In vitro translation experiments demonstrate that both the short and the long forms of the enzyme are type II membrane-bound glycoproteins.Russo R.N., Shaper N.L., Shaper J.H.J. Biol. Chem. 265:3324-3331(1990) Identification of a region of UDP-galactose:N-acetylglucosamine beta 4-galactosyltransferase involved in UDP-galactose binding by differential labeling.Yadav S.P., Brew K.J. Biol. Chem. 265:14163-14169(1990) Structure and function in galactosyltransferase. Sequence locations of alpha-lactalbumin binding site, thiol groups, and disulfide bond.Yadav S.P., Brew K.J. Biol. Chem. 266:698-703(1991) Crystal structures of the bovine beta4galactosyltransferase catalytic domain and its complex with uridine diphosphogalactose.Gastinel L.N., Cambillau C., Bourne Y.EMBO J. 18:3546-3557(1999) Crystal structure of lactose synthase reveals a large conformational change in its catalytic component, the beta1,4-galactosyltransferase-I.Ramakrishnan B., Qasba P.K.J. Mol. Biol. 310:205-218(2001) Crystal structure of beta1,4-galactosyltransferase complex with UDP-Gal reveals an oligosaccharide acceptor binding site.Ramakrishnan B., Balaji P.V., Qasba P.K.J. Mol. Biol. 318:491-502(2002) The role of tryptophan 314 in the conformational changes of beta1,4-galactosyltransferase-I.Ramasamy V., Ramakrishnan B., Boeggeman E., Qasba P.K.J. Mol. Biol. 331:1065-1076(2003)
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NCBI AND UNIPROT INFORMATION

NCBI GI #	29135321
NCBI GeneID	281781
NCBI Accession #	NP_803478.1
NCBI GenBank Nucleotide #	NM_177512.2
UniProt Accession #	P08037; Q0VC05; Q8MIG0
Molecular Weight	29.5 kDa
NCBI Official Full Name	beta-1,4-galactosyltransferase 1
NCBI Official Symbol	B4GALT1
NCBI Official Synonym Symbols	GGTB2
NCBI Protein Information	beta-1,4-galactosyltransferase 1
UniProt Protein Name	Beta-1,4-galactosyltransferase 1
UniProt Gene Name	B4GALT1
UniProt Synonym Gene Names	GALT; GGTB2; Beta-1,4-GalTase 1; Beta4Gal-T1; b4Gal-T1
UniProt Entry Name	B4GT1_BOVIN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/b4galt1-recombinant-protein-e-coli/113906>