

Recombinant Human ABO, His-tagged

Cat. No. ABO-1013H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human ABO protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques (54-354aa).
Species	Human
Source	Human
Description	ABO, also known as NAGAT, belongs to the glycosyltransferase 6 family. This protein is the basis of the ABO blood group system and related to the first discovered blood group system, ABO. Which allele is present in an individual determines the blood group. The histo-blood group ABO involves three carbohydrate antigens: A, B, and H. A, B, and AB individuals express a glycosyltransferase activity that converts the H antigen to the A antigen (by addition of UDP-GalNAc) or to the B antigen (by addition of UDP-Gal), whereas O individuals lack such activity.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 20% glycerol, 200mM NaCl
Molecular Weight	37.4kDa (322aa), confirmed by MALDI-TOF
Purity	> 85% by SDS - PAGE
Concentration	0.5mg/ml (determined by Bradford assay)
Sequences of amino	MGSSHHHHHH SSGLVPRGSH MAVREPDHLQ RVSLPRMVYP QPKVLTPCRK

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acids

DVLVWTPWLA PIVWEGTFNI DILNEQFRLQ NTTIGLTVFA IKKYVAFLKL
 FLETAEKHFM VGHRVHYVVF TDQPAAVPRV TLGTGRQLSV LEVRAYKRWQ
 DVSMRRMEMI SDFCERRFLS EVDYLVVCVDV DMEFRDHVGV EILTPLFGTL
 HPGFYGSSRE AFTYERRPQS QAYIPKDEGD FYYLGGFFGG SVQEVQRLTR
 ACHQAMMVDQ ANGIEAVWHD ESHLNKYLLR HKPTKVLSPY YLWDQQLLW
 PAVLRKLRFT AVPKNHQAVR NP

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

Pathways

Glycosphingolipid biosynthesis - lacto and neolacto series; Metabolic pathways

GENE INFORMATION
Gene Name

ABO ABO blood group (transferase A, alpha 1-3-N-acetylgalactosaminyltransferase; transferase B, alpha 1-3-galactosyltransferase) [Homo sapiens]

Official Symbol

ABO

Synonyms

ABO; GTB; NAGAT; A3GALNT; A3GALT1; ABO blood group (transferase A, alpha 1-3-N-acetylgalactosaminyltransferase; transferase B, alpha 1-3-galactosyltransferase); histo-blood group ABO system transferase; ABO glycosyltransferase; histo-blood group A transferase; histo-blood group B transferase; histo-blood group A2 transferase; B(A) alpha-1,3-galactosyltransferase; fucosylglycoprotein 3-alpha-galactosyltransferase; fucosylglycoprotein alpha-N-acetylgalactosaminyltransferase; glycoprotein-fucosylgalactoside alpha-galactosyltransferase; glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase; EC 2.4.1.37; EC 2.4.1.40; A transferase

Gene ID

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mRNA Refseq	NM_020469
Protein Refseq	NP_065202
MIM	110300
UniProt ID	P16442
Chromosome Location	9q34.2
Function	fucosylgalactoside 3-alpha-galactosyltransferase activity; glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase activity; metal ion binding; transferase activity, transferring hexosyl groups

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