

# Product Information

## **MemDX™ Membrane Protein Human ABO (ABO, alpha 1-3-N-acetylgalactosaminyltransferase and alpha 1-3-galactosyltransferase) Full Length**

Cat. No.: **MPC4150K**

This product is for research use only and is not intended for diagnostic use.

This product is a made-to-order Human ABO membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

ABO

#### Protein Length

Full length

#### Protein Class

Transferase

#### TMD

1

#### Sequence

MAEVLRLTAGKPKCHALRPMILFLIMLVLVLFYGYGVLSRSLMPGSLERG  
FCMAVREPDHLQRVSLPRMVYPQPKVLTPCRKDVLVVTPWLAPIVWEGTF  
NIDILNEQFRLQNTTIGLTVFAIKKYVAFLKLFLATAEKHFHVMGHRVHYY  
VFTDQPAAVPRVTLGTGRQLSVLEVRAVKRWQDVSMRRMEMISDFCERRF  
LSEVDYLVCDVDMEFRDHVGVEILTPLFGTLHPGFYGYSSREAFTYERRP  
QSQAYIPKDEGDFYYLGGFFGGSVQEVQRLTRACHQAMMVDQANGIEAVW  
HDESHLNKYLLRHKPTKVLSPPEYLWDQQLLGWPAVLRKLRFTAVPKNHQA  
VRNP

### Product Description

#### Expression Systems

HEK293

#### Tag

Based on specific requirements

#### Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

**Form**

Liquid

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

**Target****Target Protein**

ABO

**Full Name**

ABO, alpha 1-3-N-acetylgalactosaminyltransferase and alpha 1-3-galactosyltransferase

**Introduction**

This gene encodes proteins related to the first discovered blood group system, ABO. Variation in the ABO gene (chromosome 9q34.2) is the basis of the ABO blood group, thus the presence of an allele determines the blood group in an individual. The 'O' blood group is caused by a deletion of guanine-258 near the N-terminus of the protein which results in a frameshift and translation of an almost entirely different protein. Individuals with the A, B, and AB alleles express glycosyltransferase activities that convert the H antigen into the A or B antigen. Other minor alleles have been found for this gene. This locus has been identified as a susceptibility locus for severe coronavirus disease 2019 (COVID-19) by genome-wide association study.

**Alternative Names**

ABO; GTB; NAGAT; A3GALNT; A3GALT1; histo-blood group ABO system transferase; ABO blood group (transferase A, alpha 1-3-N-acetylgalactosaminyltransferase; transferase B, alpha 1-3-galactosyltransferase); B(A) alpha-1,3-galactosyltransferase; histo-blood group A2 transferase; ABO, alpha 1-3-N-acetylgalactosaminyltransferase and alpha 1-3-galactosyltransferase

**Gene ID**

[28](#)

**UniProt ID**

[P16442](#)