

Human B4GALT1 ELISA Kit | B4GALT1 elisa kit

Human B4GALT1 PicoKine ELISA Kit

CATALOG #
AAA125078

REACTIVITY
Human

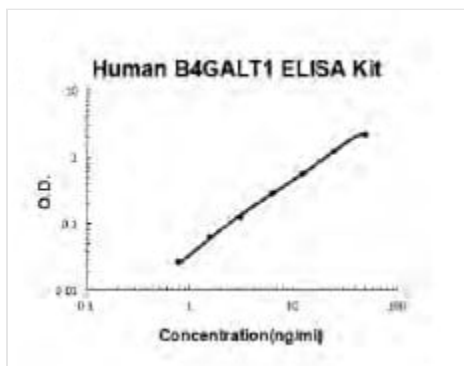
PRODUCT SYNONYMS

B4GALT1; Human B4GALT1 PicoKine ELISA Kit; Human B4GALT1; B4GALT1 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human B4GALT1
Sequence Length	398
Samples	Cell culture supernates, serum and plasma(heparin, edta)
Detection Range	0.78ng/ml-50ng/ml
Sensitivity	<0.1ng/ml
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Inter-Assay Precision (Precision across assays):Three samples of known concentration were tested in separate assays to assess interassay precision.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for B4GALT1 elisa kit	Principle of the Assay: The Picokine™ Human B4GALT1 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human B4GALT1 with a 96-well strip plate that is pre-coated with antibody specific for B4GALT1. The detection antibody is a biotinylated antibody specific for B4GALT1. The capture antibody is A monoclonal antibody from mouse, the detection antibody is a biotinylated detection polyclonal antibody from goat. The kit contains recombinant Human B4GALT1 with immunogen: Expression system for standard: NSO, Immunogen sequence: G44-S398. The kit is analytically validated with ready to use reagents. To measure Human B4GALT1, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Human B4GALT1 in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human B4GALT1 in the sample. Background/Introduction: Beta-1,4-galactosyltransferase 1 is an enzyme that in humans is encoded by the B4GALT1 gene. It is mapped to 9p21.1. This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes. They encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose; all transfer galactose in a beta1,4 linkage to similar acceptor sugars: GlcNAc, Glc, and Xyl. Each beta4GalT has a distinct function in the biosynthesis of different glycoconjugates and saccharide structures. As type II membrane proteins, they have an N-terminal hydrophobic signal sequence that directs the protein to the Golgi apparatus and which then remains uncleaved to function as a transmembrane anchor. By sequence similarity, the beta4GalTs form four groups: beta4GalT1 and beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. This gene is unique among the beta4GalT genes because it encodes an enzyme that participates both in glycoconjugate and lactose biosynthesis. For the first activity, the enzyme adds galactose to N-acetylglucosamine residues that are either monosaccharides or the nonreducing ends of glycoprotein carbohydrate chains. The second activity is restricted to lactating mammary tissues where the enzyme forms a heterodimer with alpha-lactalbumin to catalyze UDP-galactose + D-glucose UDP + lactose. The two enzymatic forms result from alternate transcription initiation sites and post-translational processing. Two transcripts, which differ only at the 5' end, with approximate lengths of 4.1 kb and 3.9 kb encode the same protein. The longer transcript encodes the type II membranebound, trans-Golgi resident protein involved in glycoconjugate biosynthesis. The shorter transcript encodes a protein which is cleaved to form the soluble lactose synthase.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	13929462
NCBI GeneID	2683
NCBI Accession #	NP_001488.2
NCBI GenBank Nucleotide #	NM_001497.3
UniProt Accession #	P15291
NCBI Official Full Name	beta-1,4-galactosyltransferase 1
NCBI Official Synonym Full Names	beta-1,4-galactosyltransferase 1
NCBI Official Symbol	B4GALT1
NCBI Official Synonym Symbols	GT1; GTB; CDG2D; GGTB2; B4GAL-T1; beta4Gal-T1
NCBI Protein Information	beta-1,4-galactosyltransferase 1

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.