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C1GALT1C1 Rabbit pAb

Catalog # AP97279

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q96EU7
Other Accession	Q96EU7
Predicted	Rat, Pig, Human, Mouse, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36382
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human C1GALT1C1
Epitope Specificity	181-280/318
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the glycosyltransferase 31 family. Beta3-Gal-T subfamily.
SUBUNIT	Associates with core 1 beta-3-galactosyltransferase (C1GALT1), probably not with the soluble active form.
DISEASE	Defects in C1GALT1C1 are the cause of Tn syndrome (TNSYN) [MIM:300622]. Tn syndrome is a rare autoimmune disease caused by somatic mutation in the C1GALT1C1 gene in which subpopulations of blood cells of all lineages carry an incompletely glycosylated membrane glycoprotein, i.e. the Tn antigen. Since leukocytes and platelets are affected as well as red cells, anemia, leukopenia and thrombocytopenia are features. Tn-polyagglutinability is sometimes associated with leukemia or is a preleukemic state.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a type II transmembrane protein that is similar to the core 1 beta1,3-galactosyltransferase 1, which catalyzes the synthesis of the core-1 structure, also known as Thomsen-Friedenreich antigen, on O-linked glycans. This gene product lacks the galactosyltransferase activity itself, but instead acts as a molecular chaperone required for the folding, stability and full activity of the core 1 beta1,3-galactosyltransferase 1. Mutations in this gene have been associated with Tn syndrome. Alternatively spliced transcript variants encoding the same protein have been identified. [provided by RefSeq, Dec 2009]

Additional Information

Gene ID	29071
Other Names	AHUS8; C1GALT2; C38H2-L1; COSMC; HSPC067; MST143; TNPS; C1GLC_HUMAN; C1GALT1C1; C38H2-like protein 1 (C38H2-L1); Core 1 beta1, 3-galactosyltransferase 2 (C1Gal-T2 | C1GalT2 | Core 1 beta3-Gal-T2); Core 1

	beta3-galactosyltransferase-specific molecular chaperone; C1GALT1 specific chaperone 1; core 1 beta3-Gal-T-specific molecular chaperone
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	C1GALT1C1
Synonyms	COSMC
Function	Probable chaperone required for the generation of 1 O-glycan Gal-beta1-3GalNAc-alpha1-Ser/Thr (T antigen), which is a precursor for many extended O-glycans in glycoproteins. Probably acts as a specific molecular chaperone assisting the folding/stability of core 1 beta-3-galactosyltransferase (C1GALT1).
Cellular Location	Membrane; Single-pass type II membrane protein
Tissue Location	Ubiquitously expressed. Abundantly expressed in salivary gland, stomach, small intestine, kidney, and testis and at intermediate levels in whole brain, cerebellum, spinal cord, thymus, spleen, trachea, lung, pancreas, ovary, and uterus

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.