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CASD1/C7orf12 Rabbit pAb

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Catalog # AP59246

Product Information

Primary Accession	Q96PB1
Predicted	Rat, Pig, Dog, Human, Mouse, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	91680
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CASD1/C7orf12
Epitope Specificity	201-300/797
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Golgi apparatus, Golgi apparatus membrane, Multi-pass membrane protein
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Additional Information

Gene ID	64921
Other Names	N-acetylneuraminate (7)9-O-acetyltransferase, 2.3.1.45, CAS1 domain-containing protein 1, CAS1 protein, Cas1p, Sialate O-acetyltransferase, SOAT, CASD1 (HGNC:16014), C7orf12
Dilution	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	CASD1 (HGNC:16014)
Synonyms	C7orf12
Function	Key enzyme in the biosynthesis of O-acetylated (O-Ac) sialoglycans such as gangliosides O-AcGD3 and O-AcGD2, which affect various processes such as cell-cell interactions, host-pathogen recognition (PubMed:20947662, PubMed:26169044, PubMed:34208013). Catalyzes the transfer of an acetyl group from a donor, the acetyl- coenzyme-A molecule (acetyl-CoA), to the

	C7/8/9 OH-position of a sialic acid residue (PubMed:20947662, PubMed:26169044). The primary site of O- acetyl group transfer on sialic acid seems to depend on cell type and can be C7, from which the O-acetyl group could subsequently migrate to the C8 and then to the C9 position, or at C9 with possibility of migrating to the C8 and then to the C7 position (PubMed:20947662, PubMed:26169044). Together with ST8SIA1 (GD3 synthase) it increases the levels of ganglioside Ac-O-7-GD3 (PubMed:20947662). Can transfer the acetyl group from acetyl-CoA to free sialate (N-acetylneuraminate, Neu5Ac) in vitro, but has preferred substrate specificity for CMP- activated sialate (CMP-Neu5Ac), resulting in the formation of 9-O- acetylated CMP-Neu5Ac (CMP-Neu5,9Ac2) (PubMed:26169044). CMP-Neu5,9Ac2 may be used by sialyltransferases as a sialate donor for glycoconjugate acceptors such as ganglioside GD3 (PubMed:26169044). O-acetylation at position C9 of ganglioside GD3 can counteract the pro-apoptotic effects of the ganglioside GD3 in tumor cells (PubMed:12486096).
Cellular Location	Golgi apparatus membrane; Multi-pass membrane protein
Tissue Location	Highly expressed in peripheral B lymphocytes.

Background

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