

**CASD1/C7orf12 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP59246****Specification****CASD1/C7orf12 Polyclonal Antibody - Product Information**

|                                |                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Application                    | IHC-F, IF, E                                                                                                              |
| Primary Accession              | <a href="#">Q96PB1</a>                                                                                                    |
| Reactivity                     | Rat, Pig, Dog, Bovine                                                                                                     |
| Host                           | Rabbit                                                                                                                    |
| Clonality                      | Polyclonal                                                                                                                |
| Calculated MW                  | 88 KDa                                                                                                                    |
| Physical State                 | Liquid                                                                                                                    |
| Immunogen                      | KLH conjugated synthetic peptide derived from human CASD1/C7orf12                                                         |
| Epitope Specificity            | 201-300/797                                                                                                               |
| Isotype                        | IgG                                                                                                                       |
| <b>Purity</b>                  |                                                                                                                           |
| 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                                                    |
| SIMILARITY                     | Belongs to the PC-esterase family. CASD1 subfamily.                                                                       |
| Important Note                 | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |

**CASD1/C7orf12 Polyclonal Antibody - Additional Information****Gene ID** 64921**Other Names**

N-acetylneuraminate 9-O-acetyltransferase, 2.3.1.45, CAS1 domain-containing protein 1, Sialate O-acetyltransferase, SOAT, CASD1 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=16014](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=16014)), C7orf12

**Target/Specificity**

Highly expressed in peripheral B lymphocytes.

**Dilution**

IHC-F ~ ~ N/A  
IF ~ ~ 1:50 ~ 200  
E ~ ~ N/A

**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.

## CASD1/C7orf12 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/20947662" target="\_blank">20947662</a>, PubMed:<a href="http://www.uniprot.org/citations/26169044" target="\_blank">26169044</a>, PubMed:<a href="http://www.uniprot.org/citations/34208013" target="\_blank">34208013</a>). 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:<a href="http://www.uniprot.org/citations/20947662" target="\_blank">20947662</a>, PubMed:<a href="http://www.uniprot.org/citations/26169044" target="\_blank">26169044</a>). 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:<a href="http://www.uniprot.org/citations/20947662" target="\_blank">20947662</a>, PubMed:<a href="http://www.uniprot.org/citations/26169044" target="\_blank">26169044</a>). Together with ST8SIA1 (GD3 synthase) it increases the levels of ganglioside Ac-O-7-GD3 (PubMed:<a href="http://www.uniprot.org/citations/20947662" target="\_blank">20947662</a>). 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:<a href="http://www.uniprot.org/citations/26169044" target="\_blank">26169044</a>). CMP-Neu5,9Ac2 may be used by sialyltransferases as a sialate donor for glycoconjugate acceptors such as ganglioside GD3 (PubMed:<a href="http://www.uniprot.org/citations/26169044" target="\_blank">26169044</a>). O-acetylation at position C9 of ganglioside GD3 can counteract the pro-apoptotic effects of the ganglioside GD3 in tumor cells (PubMed:<a href="http://www.uniprot.org/citations/12486096" target="\_blank">12486096</a>).

### Cellular Location

Golgi apparatus membrane; Multi-pass membrane protein

### Tissue Location

Highly expressed in peripheral B lymphocytes.

## CASD1/C7orf12 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## CASD1/C7orf12 Polyclonal Antibody - Images