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# DAD1 Antibody
**Catalog # ASC10243**

## Specification

### DAD1 Antibody - Product Information

| | |
|---|---|
| Application | **WB, ICC, IF** |
| Primary Accession | P61803 |
| Other Accession | AAH09798, 14602573 |
| Reactivity | **Human, Mouse** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **IgG** |
| Application Notes | **DAD1 antibody can be used for detection of DAD1 by Western blot at 0.5 to 2 µg/mL. Despite its predicted molecular weight, DAD1 migrates at ~22 kDa in SDS-PAGE. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 10 µg/mL.** |

### DAD1 Antibody - Additional Information

Gene ID **1603**

**Other Names**
DAD1 Antibody: OST2, Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit DAD1, Defender against cell death 1, Oligosaccharyl transferase subunit DAD1, defender against cell death 1

**Target/Specificity**
DAD1;

**Reconstitution & Storage**
DAD1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**
DAD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### DAD1 Antibody - Protein Information

**Name** DAD1 (HGNC:2664)

**Function**
Subunit of the oligosaccharyl transferase (OST) complex that catalyzes the initial transfer of a defined glycan (Glc(3)Man(9)GlcNAc(2) in eukaryotes) from the lipid carrier dolichol-pyrophosphate to an asparagine residue within an Asn-X-Ser/Thr consensus motif in nascent

polypeptide chains, the first step in protein N-glycosylation (PubMed:<a href="http://www.uniprot.org/citations/22467853" target="_blank">22467853</a>, PubMed:<a href="http://www.uniprot.org/citations/31831667" target="_blank">31831667</a>). N-glycosylation occurs cotranslationally and the complex associates with the Sec61 complex at the channel-forming translocon complex that mediates protein translocation across the endoplasmic reticulum (ER). All subunits are required for a maximal enzyme activity (By similarity). Required for the assembly of both SST3A- and SS3B- containing OST complexes. Loss of the DAD1 protein triggers apoptosis (PubMed:<a href="http://www.uniprot.org/citations/22467853" target="_blank">22467853</a>).

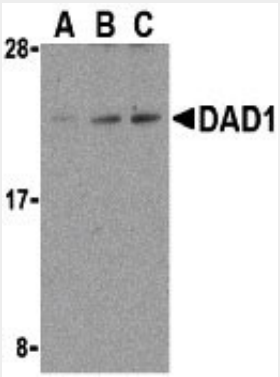
**Cellular Location**
Endoplasmic reticulum membrane; Multi-pass membrane protein

## DAD1 Antibody - Protocols

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

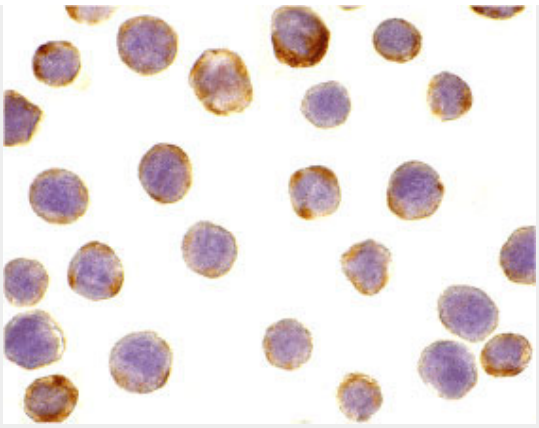
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## DAD1 Antibody - Images

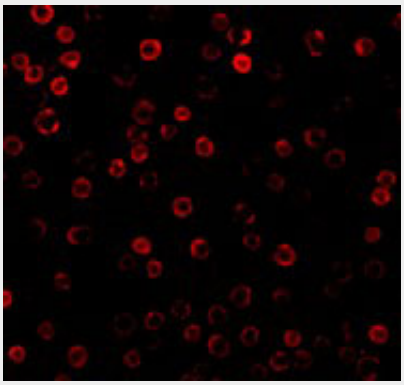



Western blot analysis of DAD1 in HepG2 cell lysate with DAD1 antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.

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Immunocytochemistry of DAD1 in HepG2 cells with DAD1 antibody at 10 µg/mL.



Immunofluorescence of DAD1 in HepG2 cells with DAD1 antibody at 10 µg/mL.

**DAD1 Antibody - Background**

DAD1 Antibody: Defender of cell death 1 (DAD1) was initially discovered in BHK21 cells as a negative regulator of programmed cell death, a process important for normal organism development and tissue homeostasis. DAD1 was later shown to be a subunit of the mammalian oligosaccharyltransferase complex and is required for its function and structural integrity. Mice lacking DAD1 express abnormal N-linked glycoproteins and undergo increased apoptotic-associated embryonic death. Furthermore, overexpression of DAD1 mRNA is seen in some human hepatocellular carcinomas, indicating it may also play a role in carcinogenesis. It should be noted that DAD1 is not related to the inhibitor of apoptosis proteins (IAP) family and does not contain any baculoviral IAP repeat (BIR) domains.

**DAD1 Antibody - References**

Nakashima T, Sekiguchi T, Kuraoka A, et al. Molecular cloning of a human cDNA encoding a novel protein, DAD1, whose defect causes apoptotic cell death in hamster BHK21 cells. Mol. Cell Biol. 1993; 13:6367-74.
Stellar H. Mechanisms and genes of cellular suicide. Science 1995; 267:1445-9.
Gilmore R and Kelleher DJ. DAD1, the defender against apoptotic cell death, is a subunit of the mammalian oligosaccharyltransferase. Proc. Natl. Acad. Sci. USA 1997; 94:4994-9.
Sanjay A, Fu J, and Kreibich G. DAD1 is required for the function and the structural integrity of the oligosaccharyltransferase complex. J. Biol. Chem. 1998; 273:26094-9.