10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DAD1 Antibody
Catalog # ASC10243

Specification

DAD1 Antibody - Product Information

Application	**WB, IF, ICC, E**
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:22467853, PubMed:31831667). 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:22467853).

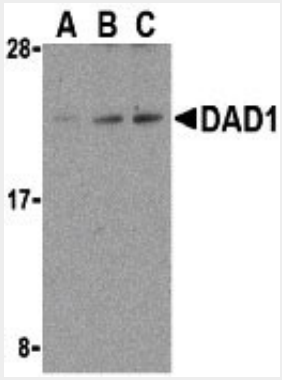
Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

DAD1 Antibody - Protocols

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

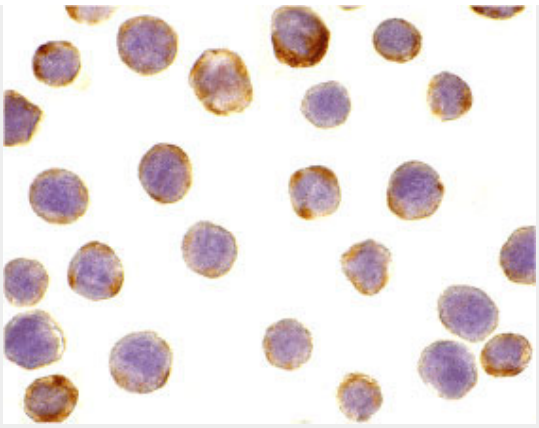
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DAD1 Antibody - Images

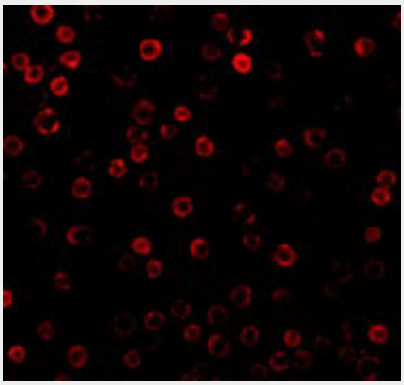


Western blot analysis of DAD1 in HepG2 cell lysate with DAD1 antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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.