

DAD1 Antibody

DAD1: Defender against cell death 1

CATALOG NO.: 3313

BACKGROUND:

Defender of cell death 1 (DAD1) was initially discovered in BHK21 cells as a negative regulator of programmed cell death (1), a process important for normal organism development and tissue homeostasis (2). DAD1 was later shown to be a subunit of the mammalian oligosaccharyltransferase complex and is required for its function and structural integrity (3,4). Mice lacking DAD1 express abnormal N-linked glycoproteins and undergo increased apoptotic-associated embryonic death (5,6). Furthermore, overexpression of DAD1 mRNA is seen in some human hepatocellular carcinomas (7), 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.

SOURCE:

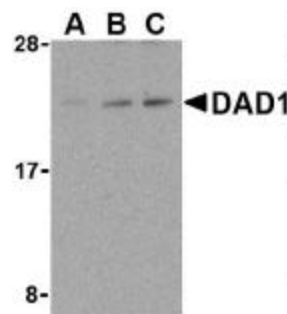
Rabbit polyclonal DAD1 antibody was raised against a peptide corresponding to 14 amino acids near the C terminus of human DAD1 (GenBank accession no. AAH09798).

APPLICATION:

DAD1 antibody can be used for detection of DAD1 by Western blot at 0.5 to 2 µg/ml. (Optimal dilution should be determined by user.) Despite its predicted molecular weight, DAD1 migrates at ~22 kDa in SDS-PAGE. DAD1 antibody is human and mouse reactive. **For research use only.**

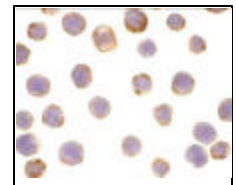
STORAGE:

DAD1 antibody is supplied as ion exchange chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year. Azide free antibody is available.



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

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



RELATED PRODUCTS:

Blocking peptide, Catalog No. **3313P**.
HepG2 Cell Lysate, Catalog No. **1211**.
XIAP Antibody (CT), Catalog No. **3331**.

REFERENCES:

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2. Stellar H. Mechanisms and genes of cellular suicide. *Science* 1995; 267:1445-9.
3. 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.
4. 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.
5. Hong NA, Flannery M, Hsieh SN, et al. Mice lacking Dad1, the defender against apoptotic death-1, express abnormal N-linked glycoproteins and undergo increased embryonic apoptosis. *Dev. Biol.* 2000; 220:76-84.
6. Brewster JL, Martin SL, Toms J, et al. Deletion of DAD1 in mice induces an apoptosis-associated embryonic death. *Genesis* 2000; 26:271-8.
7. Tanaka K, Kondoh N, Shuda M, et al. Enhanced expression of mRNAs of antiseecretory factor-1, gp96, DAD1 and CDC34 in human hepatocellular carcinomas. *Biochim. Biophys. Acta.* 2001; 1536:1-12. (RD0306)