

# DRAM Antibody

Catalog # ASC10498

#### Specification

## DRAM Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>O8N682</u> <u>AAH18435</u>, <u>22450862</u> Human, Mouse, Rat Rabbit Polyclonal IgG DRAM antibody can be used for detection of DRAM by Western blot at 0.5 - 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20 μg/mL.

## **DRAM Antibody - Additional Information**

Gene ID 55332 Other Names DRAM Antibody: DRAM, DRAM, DNA damage-regulated autophagy modulator protein 1, Damage-regulated autophagy modulator, damage-regulated autophagy modulator

Target/Specificity DRAM;

#### **Reconstitution & Storage**

DRAM antibody can be stored at 4°C for three months and -20°C, 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

DRAM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **DRAM Antibody - Protein Information**

Name DRAM1

Synonyms DRAM

Function

Lysosomal modulator of autophagy that plays a central role in p53/TP53-mediated apoptosis. Not involved in p73/TP73-mediated autophagy.

**Cellular Location** 



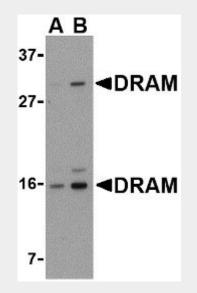
Lysosome membrane; Multi-pass membrane protein

### **DRAM Antibody - Protocols**

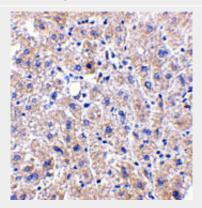
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **DRAM Antibody - Images**

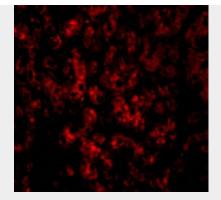


Western blot analysis of DRAM in 293 cell lysate with DRAM antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of DRAM in human liver tissue with DRAM antibody at 2.5 µg/mL.





Immunofluorescence of DRAM in Human Liver cells with DRAM antibody at 20 µg/mL.

## DRAM Antibody - Background

DRAM Antibody: Damage-regulated autophagy modulator (DRAM) is a p53 target gene encoding a lysosomal protein that induces autophagy, a process that degrades cytosolic proteins and organelles. It has been suggested that activation of DRAM by p53 is simultaneous to the activation by p53 of one or more proapoptotic genes such as PUMA, Bax, etc., and that the signaling pathways regulated by these genes promote a full cell death response. By itself, DRAM cannot induce apoptosis, but the fact that it is inactivated in certain cancers highlights the importance of DRAM and suggests that autophagy may play a more important role in cancer than initially suspected. At least two different isoforms of DRAM are known to exist.

#### **DRAM Antibody - References**

Crighton D, Wilkinson S, O'Prey J, et al. DRAM, a p53-induced modulator of autophagy, is critical for apoptosis. Cell 2006; 126:121-34.

Gozuacik D and Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. Oncogene. 2004; 23:2891-906.

Crighton D, Wilkinson S, and Ryan KM. DRAM links autophagy to p53 and programmed cell death. Autophagy 2007; 3:72-4. (07-01D)