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

DRAM Antibody

Catalog # ASC10499

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q8N682
Other Accession	AAH18435, 22450862
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	26253
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DRAM antibody can be used for detection of DRAM by Western blot at 0.5 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

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

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

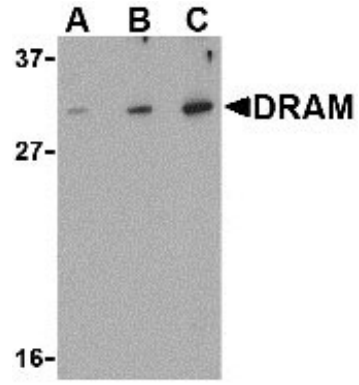
Background

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 together 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.

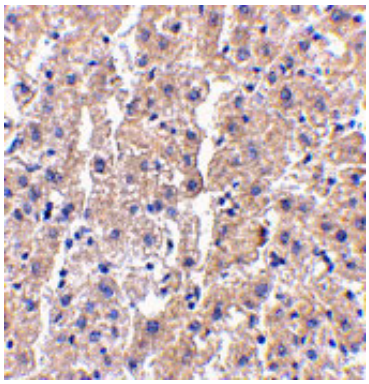
References

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.

Images

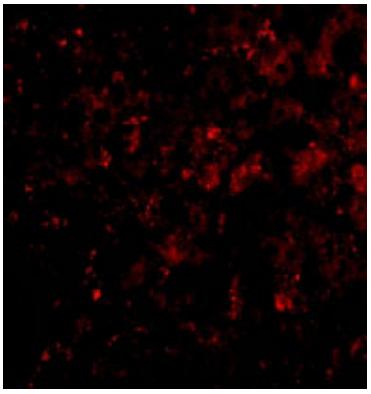


Western blot analysis of DRAM in K562 cell lysate with DRAM antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.



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

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.