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ADRM1 Antibody
Catalog # ASC11901

Specification

ADRM1 Antibody - Product Information

Application	**WB, IHC-P, E**
Primary Accession	Q16186
Other Accession	NP_783163, 28373194
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 45 kDa** **Observed: 48 kDa KDa**
Application Notes	**ADRM1 antibody can be used for detection of ADRM1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.**

ADRM1 Antibody - Additional Information

Gene ID **11047**

Target/Specificity
ADRM1; ADRM1 antibody is human, mouse and rat reactive. At least two isoforms of ADRM1 are know to exist; this antibody will detect both isoforms.

Reconstitution & Storage
ADRM1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
ADRM1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ADRM1 Antibody - Protein Information

Name ADRM1

Synonyms GP110

Function
Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins (PubMed:16815440, PubMed:16906146, PubMed:16990800, PubMed:17139257, PubMed:18497817, PubMed:24752541, PubMed:<a

href="http://www.uniprot.org/citations/25702870" target="_blank">25702870, PubMed:25702872). This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required (PubMed:16815440, PubMed:16906146, PubMed:16990800, PubMed:17139257, PubMed:18497817, PubMed:24752541, PubMed:25702870, PubMed:25702872). Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair (PubMed:16815440, PubMed:16906146, PubMed:16990800, PubMed:17139257, PubMed:18497817, PubMed:24752541, PubMed:25702870, PubMed:25702872). Within the complex, functions as a proteasomal ubiquitin receptor (PubMed:18497817). Engages and activates 19S- associated deubiquitinases UCHL5 and PSMD14 during protein degradation (PubMed:16906146, PubMed:16990800, PubMed:17139257, PubMed:24752541). UCHL5 reversibly associate with the 19S regulatory particle whereas PSMD14 is an intrinsic subunit of the proteasome lid subcomplex (PubMed:16906146, PubMed:16990800, PubMed:17139257, PubMed:24752541).

Cellular Location
Cytoplasm. Nucleus

ADRM1 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

ADRM1 Antibody - Images

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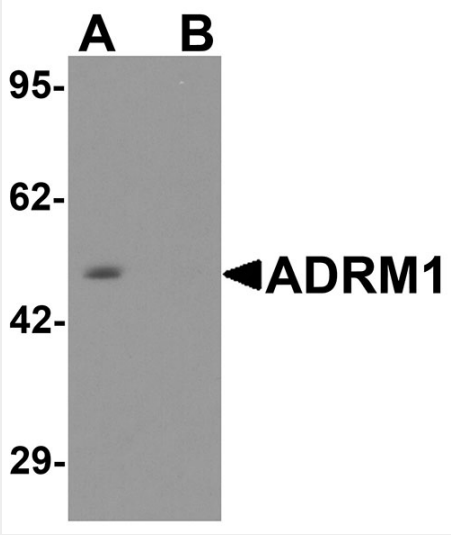
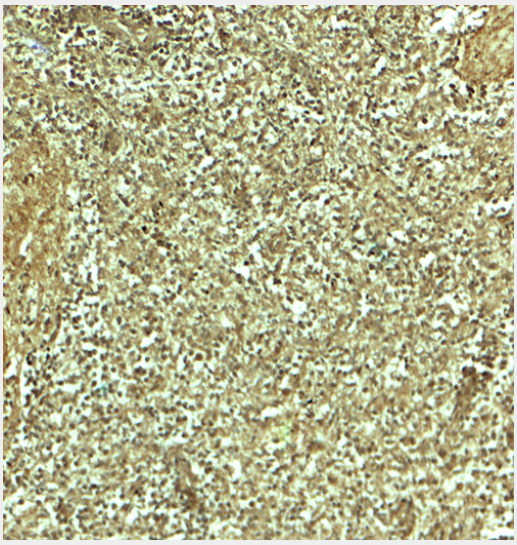


Western blot analysis of ADRM1 in EL cell lysate with ADRM1 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of ADRM1 in human spleen tissue with ADRM1 antibody at 5 µg/mL.

ADRM1 Antibody - Background

The adhesion-regulating molecule 1 (ADRM1) is thought to be involved in protein recruitment and cell adhesion and functions as a proteasomal ubiquitin receptor (1). ADRM1 promotes the activity of UCH-L5 and plays a role in lymphocyte homing. The carboxy-terminal domain of mammalian ADRM1 serves to bind and enhance the isopeptidase activity of UCHL5/UCH37, perhaps serving as a mechanism to accelerate ubiquitin chain disassembly (2,3). ADRM1 expression is induced by IFN-gamma in some cancer cell lines and its expression is upregulated in other metastatic cells, suggesting a role in carcinogenesis (4,5).

ADRM1 Antibody - References

Husnjak K, Elsasser S, Zhang N, et al. Proteasome subunit Rpn13 is a novel ubiquitin receptor. Nature 2008; 453:481-8.
Yao T, Song L, Xu W, et al. Proteasome recruitment and activation of the Uch37 deubiquitinating enzyme by Adrm1. Nat. Cell Biol. 2006; 8:994-1002.
Qiu XB, Ouyang SY, Li CJ, et al. hRpn13/ADRM1/GP110 is a novel proteasome subunit that binds the

deubiquitinating enzyme, UCH37. EMBO J. 2006; 25:5742-53.
Al-Shami A, Jhaver KG, Vogel P, et al. Regulators of the proteasome pathway, Uch37 and Rpn13, play distinct roles in mouse development. PLoS One 2010; 5:e13654.