

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
Application Notes	Observed: 48 kDa KDa 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 known to exist; this antibody will detect both isoforms.	
Reconstitution & Storage ADRM1 antibody can be stored at 4°C for three months and -20°C, 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: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

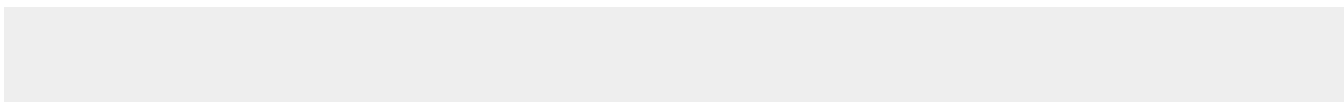
Cytoplasm. Nucleus

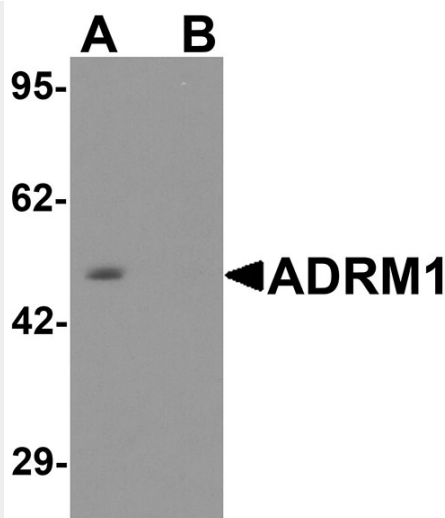
ADRM1 Antibody - Protocols

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

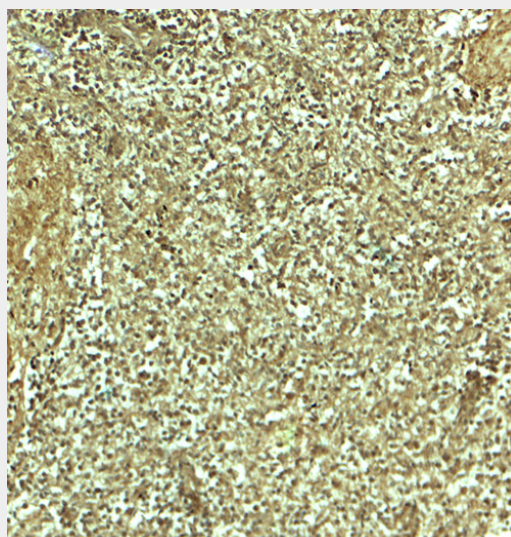
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ADRM1 Antibody - Images





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



Immunohistochemistry of ADRM1 in human spleen tissue with ADRM1 antibody at 5 μ g/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, Jhaveri KG, Vogel P, et al. Regulators of the proteasome pathway, Uch37 and Rpn13, play distinct roles in mouse development. PLoS One 2010; 5:e13654.