

ADRM1 (D-20): sc-74308

BACKGROUND

ADRM1 (adhesion-regulating molecule 1), also known as GP110, ARM-1 or Rpn13, is a 407 amino acid protein that localizes to both the nucleus and the cytoplasm and is thought to be involved in protein recruitment and cell adhesion. An integral membrane protein, ADRM1 functions to recruit UCH-L5, a deubiquitinating enzyme, to the 26S proteasome, and once at the proteasome it promotes the activity of UCH-L5. Additionally, ADRM1 is thought to mediate lymphocyte adhesion in endothelial cells and may thus play a role in lymphocyte homing. ADRM1 expression is induced by IFN- γ in some cancer cell lines and its expression is upregulated in other metastatic cells, suggesting a role in carcinogenesis. Two isoforms of ADRM1 exist due to alternative splicing events.

REFERENCES

1. Shimada, S., et al. 1994. Molecular cloning and characterization of the complementary DNA of an M_r 110,000 antigen expressed by human gastric carcinoma cells and upregulated by γ -interferon. *Cancer Res.* 54: 3831-3836.
2. Simins, A.B., et al. 1999. Functional cloning of ARM-1, an adhesion-regulating molecule upregulated in metastatic tumor cells. *Clin. Exp. Metastasis* 17: 641-648.
3. Lamerant, N., et al. 2005. Adhesion properties of adhesion-regulating molecule 1 protein on endothelial cells. *FEBS J.* 272: 1833-1844.
4. Hamazaki, J., et al. 2006. A novel proteasome interacting protein recruits the deubiquitinating enzyme UCH37 to 26S proteasomes. *EMBO J.* 25: 4524-4536.
5. Qiu, X.B., et al. 2006. hRpn13/ADRM1/GP110 is a novel proteasome subunit that binds the deubiquitinating enzyme, UCH37. *EMBO J.* 25: 5742-5753.
6. Cherix, N., et al. 2006. A Phg2-Adrm1 pathway participates in the nutrient-controlled developmental response in *Dictyostelium*. *Mol. Biol. Cell* 17: 4982-4987.

CHROMOSOMAL LOCATION

Genetic locus: ADRM1 (human) mapping to 20q13.33; Adrm1 (mouse) mapping to 2 H4.

SOURCE

ADRM1 (D-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ADRM1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-74308 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ADRM1 (D-20) is recommended for detection of ADRM1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ADRM1 (D-20) is also recommended for detection of ADRM1 in additional species, including equine, canine, bovine and avian.

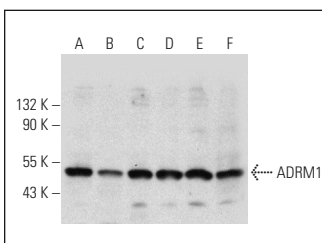
Suitable for use as control antibody for ADRM1 siRNA (h): sc-72453, ADRM1 siRNA (m): sc-72454, ADRM1 shRNA Plasmid (h): sc-72453-SH, ADRM1 shRNA Plasmid (m): sc-72454-SH, ADRM1 shRNA (h) Lentiviral Particles: sc-72453-V and ADRM1 shRNA (m) Lentiviral Particles: sc-72454-V.

Molecular Weight of ADRM1 native protein: 50 kDa.

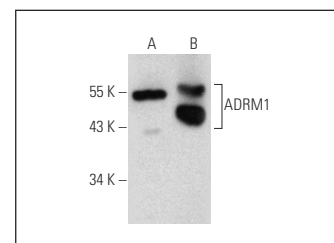
Molecular Weight of ADRM1 posttranslationally modified protein: 42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or ADRM1 (m): 293T Lysate: sc-126395.

DATA



ADRM1 (D-20): sc-74308. Western blot analysis of ADRM1 expression in HeLa (A), Hep G2 (B), K-562 (C), Ramos (D), Raji (E) and NK-92 (F) whole cell lysates.



ADRM1 (D-20): sc-74308. Western blot analysis of ADRM1 expression in non-transfected: sc-117752 (A) and mouse ADRM1 transfected: sc-126395 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **ADRM1 (D-12): sc-271398** or **ADRM1 (C-7): sc-376221**, our highly recommended monoclonal alternatives to ADRM1 (D-20).