

ARMER (B-5): sc-514476

BACKGROUND

ARMER (apoptotic regulator in the membrane of the endoplasmic reticulum), also known as ADP-ribosylation-like factor 6-interacting protein 1 (ARL6IP1 or AIP1), is a multi-pass membrane protein that belongs to the Ras superfamily. It is expressed in brain, thymus, lung, bone marrow and, to a lesser extent, in spleen, kidney and liver. ARMER is not found in the heart and is found predominantly in early myeloid progenitor cells localizing to the intracytoplasmic membranes. It interacts with ARL6, inhibits caspase-9 activity by inhibiting proteolysis of downstream substrates (including LEHD-AFC, vimentin and caspase-3) and is down-regulated during myeloid differentiation. ARMER may play a role in membrane trafficking, protein transport or cell signaling during hematopoietic maturation.

REFERENCES

1. Nomura, N., et al. 1995. Prediction of the coding sequences of unidentified human genes. II. The coding sequences of new genes (KIAA0041-KIAA0080) deduced by analysis of cDNA clones from human cell line KG-1. *DNA Res.* 1: 223-229.
2. Ingley, E., et al. 1999. A novel ADP-ribosylation like factor (ARL-6), interacts with the protein-conducting channel SEC61 β subunit. *FEBS Lett.* 459: 69-74.
3. Pettersson, M., et al. 2000. Characterization, chromosomal localization, and expression during hematopoietic differentiation of the gene encoding Arl6ip, ADP-ribosylation-like factor-6 interacting protein (ARL6). *Genomics* 68: 351-354.
4. Lui, H.M., et al. 2003. ARMER, apoptotic regulator in the membrane of the endoplasmic reticulum, a novel inhibitor of apoptosis. *Mol. Cancer Res.* 1: 508-518.

CHROMOSOMAL LOCATION

Genetic locus: ARL6IP1 (human) mapping to 16p12.3; Arl6ip1 (mouse) mapping to 7 F2.

SOURCE

ARMER (B-5) is a mouse monoclonal antibody raised against amino acids 1-115 mapping at the N-terminus of ARMER of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ARMER (B-5) is available conjugated to agarose (sc-514476 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514476 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514476 PE), fluorescein (sc-514476 FITC), Alexa Fluor[®] 488 (sc-514476 AF488), Alexa Fluor[®] 546 (sc-514476 AF546), Alexa Fluor[®] 594 (sc-514476 AF594) or Alexa Fluor[®] 647 (sc-514476 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514476 AF680) or Alexa Fluor[®] 790 (sc-514476 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ARMER (B-5) is recommended for detection of ARMER of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ARMER siRNA (h): sc-61994, ARMER siRNA (m): sc-61995, ARMER shRNA Plasmid (h): sc-61994-SH, ARMER shRNA Plasmid (m): sc-61995-SH, ARMER shRNA (h) Lentiviral Particles: sc-61994-V and ARMER shRNA (m) Lentiviral Particles: sc-61995-V.

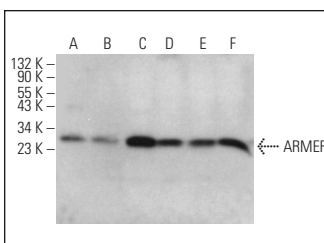
Molecular Weight of ARMER: 23 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, JEG-3 whole cell lysate: sc-364255 or K-562 whole cell lysate: sc-2203.

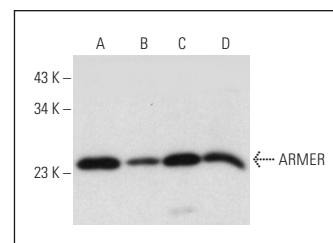
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



ARMER (B-5): sc-514476. Western blot analysis of ARMER expression in Hep G2 (A), ZR-75-1 (B), BYDP (C), NIH/3T3 (D), Jurkat (E) and NTERA-2 cl.D1 (F) whole cell lysates.



ARMER (B-5): sc-514476. Western blot analysis of ARMER expression in Hep G2 (A), JEG-3 (B) and K-562 (C) whole cell lysates and human lung tissue extract (D).

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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