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ARMER Antibody

Catalog # ASC10241

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q15041
Other Accession	Q15041, 14424435
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23363
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ARMER antibody can be used for detection of ARMER by Western blot at 0.5 to 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2 g/mL. For immunofluorescence start at 2 g/mL.

Additional Information

Gene ID	23204
Other Names	ARMER Antibody: AIP1, ARMER, SPG61, ARL6IP, KIAA0069, ADP-ribosylation factor-like protein 6-interacting protein 1, ARL-6-interacting protein 1, ADP-ribosylation factor-like 6 interacting protein 1
Target/Specificity	ARL6IP1;
Reconstitution & Storage	ARMER 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	ARMER Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ARL6IP1
Function	Positively regulates SLC1A1/EAAC1-mediated glutamate transport by increasing its affinity for glutamate in a PKC activity- dependent manner. Promotes the catalytic efficiency of SLC1A1/EAAC1 probably by reducing its interaction with ARL6IP5, a negative regulator of SLC1A1/EAAC1-mediated glutamate transport (By similarity). Plays a role in the formation and stabilization of endoplasmic reticulum tubules (PubMed:24262037). Negatively regulates apoptosis, possibly by modulating the activity of caspase-9 (CASP9). Inhibits cleavage of CASP9-dependent substrates and

	downstream markers of apoptosis but not CASP9 itself (PubMed:12754298). May be involved in protein transport, membrane trafficking, or cell signaling during hematopoietic maturation (PubMed:10995579).
Cellular Location	Endomembrane system; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Endoplasmic reticulum {ECO:0000250|UniProtKB:Q9JKW0}. Note=Predominantly localized to intracytoplasmic membranes. Preferentially localizes at the ER tubules and the edge of the ER sheets, both of which are characterized by a high membrane curvature.
Tissue Location	Expressed in all hematopoietic cell lineages, but the highest level of expression is found in early myeloid progenitor cells. Expressed in brain, bone marrow, thymus and lung. Expressed at low level in liver, kidney and spleen. Not detected in heart

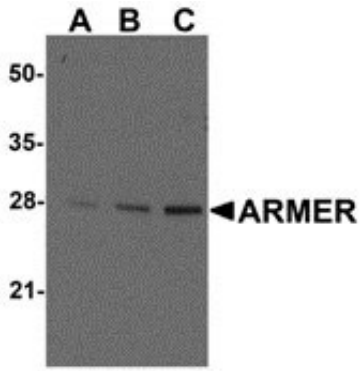
Background

ARMER Antibody: Apoptosis is important for normal development and tissue homeostasis. It is mediated by various caspases and ultimately results in the activation of endogenous endonucleases that degrade cellular DNA. Although apoptosis induced by endoplasmic reticulum (ER) stress is thought to be mediated by caspase-12, other caspases such as caspase-9 are also thought to be activated following ER stress. Recently, ARMER, a novel integral ER-membrane protein was shown to protect cells from ER stress-induced apoptosis. Analysis of the caspase proteolytic cascade suggests that ARMER acts by inhibiting caspase-9 activity, although the mechanism for this remains unkown. It should be noted that ARMER is not related to the inhibitor of apoptosis proteins (IAP) family and does not contain any baculoviral IAP repeat (BIR) domains.

References

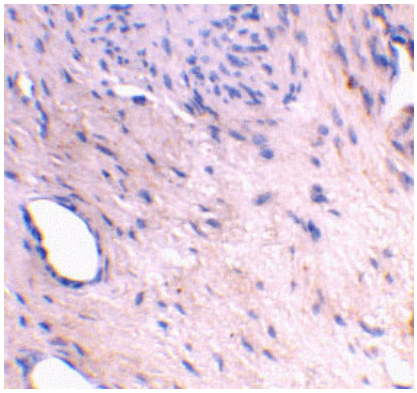
Stellar H. Mechanisms and genes of cellular suicide. Science 1995; 267:1445-9.
Nakagawa T, Zhu H, Morishima N, Li E, Xu J, Yankner BA, Yuan J. Caspase-12 mediates endoplasmic-reticulum-specific apoptosis and cytotoxicity by amyloid-β. Nature 2000; 403:98-103.
Lui HM, Chen J, Wang L, et al. ARMER, Apoptotic regulator in the membrane of the endoplasmic reticulum, a novel inhibitor of apoptosis. Mol. Cancer Res. 2003; 1:508-18.

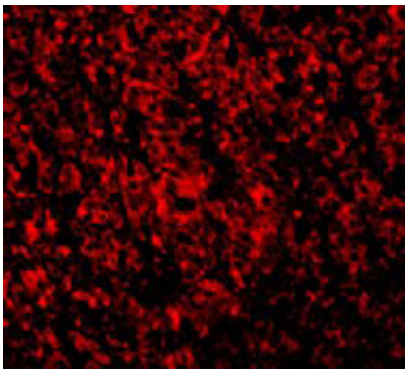
Images



Western blot ana-lysis of ARMER in mouse small intestine tissue lysates with ARMER antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.

Immunohistochemical staining of human bladder tissue using ARMER antibody at 2 µg/mL.





Immunofluorescence of ARMER in Mouse Intestine cells with ARMER antibody at 2 µg/mL.