

ARC Antibody

Catalog # ASC10051

Specification

ARC Antibody - Product Information

Application WB, IHC Primary Accession 060936

Other Accession <u>NP 003937</u>, <u>4505419</u>

Reactivity
Host
Clonality
Human
Rabbit
Polyclonal

lsotype IgG

Calculated MW Predicted: 23 kDa

Observed: 25 kDa KDa

Application Notes ARC antibody can be used for detection of

ARC by Western blot at $1 - 2 \mu g/mL$. Antibody can also be used for immunohistochemistry starting at 5

μg/mL.

ARC Antibody - Additional Information

Gene ID **8996**

Other Names

ARC Antibody: ARC, FCM, MYP, NOP, NOP30, ARC, Nucleolar protein 3, Apoptosis repressor with CARD, Myp, nucleolar protein 3 (apoptosis repressor with CARD domain)

Target/Specificity

NOL3;

Reconstitution & Storage

ARC antibody can be stored at 4° C for three months and -20° C, 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

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

ARC Antibody - Protein Information

Name NOL3 (HGNC:7869)

Function

[Isoform 1]: May be involved in RNA splicing.

Cellular Location

[Isoform 1]: Nucleus, nucleolus. Note=The SR-rich C-terminus mediates nuclear localization.



[Isoform 2]: Cytoplasm. Mitochondrion {ECO:0000250|UniProtKB:Q62881}. Sarcoplasmic reticulum {ECO:0000250|UniProtKB:Q62881}. Membrane; Lipid-anchor. Note=Phosphorylation at Thr-149 results in translocation to mitochondria. Colocalized with mitochondria in response to oxidative stress. {ECO:0000250|UniProtKB:Q62881}

Tissue Location

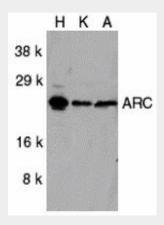
Highly expressed in heart and skeletal muscle. Detected at low levels in placenta, liver, kidney and pancreas

ARC Antibody - Protocols

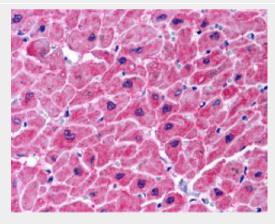
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ARC Antibody - Images

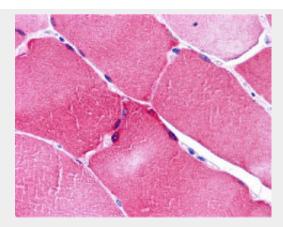


Western blot analysis of ARC in (H) HeLa, (K) K562, and (A) A549 whole cell lysates with ARC antibody at 1 μ g/mL.



Immunohistochemistry of ARC in human heart tissue with ARC antibody at 5 µg/mL.





Immunohistochemistry of ARC in human skeletal muscle with ARC antibody at 5 µg/mL.

ARC Antibody - Background

ARC Antibody: Apoptosis is regulated by death domain (DD) and/or caspase recruitment domain (CARD) containing molecules and a caspase family of proteases. CARD domain containing cell death regulators include RAIDD, Apaf-1, caspase-9, and caspase-2. A novel CARD domain containing protein was recently identified and designated ARC for apoptosis repressor with CARD. ARC interacts with caspase-2 and -8 and inhibits enzymatic activity of caspase-8. ARC suppresses apoptosis induced by cell death adapters FADD and TRADD and by cell death receptors Fas, TNFR-1 and DR3. The messenger RNA of ARC is primarily expressed in skeletal muscle and cardiac tissue.

ARC Antibody - References

Koseki T, Inohara N, Chen S, et al. ARC, an inhibitor of apoptosis expressed in skeletal muscle and heart that interacts selectively with caspases. Proc. Natl. Acad. Sci. USA 1998; 95:5156-60.