

Rabbit anti-Human ARC Polyclonal Antibody | anti-ARC antibody

ARC Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA320768	Rabbit	Human	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

ARC; Polyclonal Antibody; ARC Antibody; Apoptosis repressor with CARD; Muscle enriched cytoplasmic protein; Muscle-enriched cytoplasmic protein; MYC; MYP; Nol3; NOL3_HUMAN; NOP; Nop30; Nucleolar protein 3 (apoptosis repressor with CARD domain); Nucleolar protein 3; Nucleolar protein of 30 kDa; anti-ARC antibody

PRODUCT SPECIFICATIONS

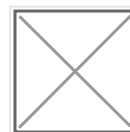
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Specificity	ARC antibody detects endogenous levels of total ARC
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	219
Applicable Applications for anti-ARC antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human ARC
Subcellular Location	Cytoplasm and Nucleus > Nucleolus.
Tissue Specificity	Highly expressed in heart and skeletal muscle. Detected at low levels in placenta, liver, kidney and pancreas.
Predicted Cross Reactivity	Pig
Similarity	Pig (88%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA320768 at 1/200 staining human brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

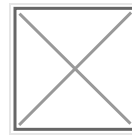


IF (Immunofluorescence)

AAA320768 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

**WB (Western Blot)**

Western blot analysis on HeLa cell lysate using ARC Antibody. The lane on the left is treated with the antigen-specific peptide.

**WB (Western Blot)**

Western blot analysis of extracts from HepG2, using ARC Antibody. Lane 1 was treated with the blocking peptide.

ADDITIONAL INFORMATION**Related Product Information for anti-ARC antibody**

Description: ARC Isoform 1 may be involved in RNA splicing. Interacts with TFPT. Isoform 1 oligomerizes and binds to SFRS9/SRp30C and also interacts with NPM1. Isoform 2 binds CASP2/caspase-2 and CASP8/caspase-8 and inhibits caspase-8 activity. 2 isoforms of the human protein are produced by alternative splicing.

Function: Isoform 1: May be involved in RNA splicing.

Subunit Structure: Oligomerizes (via CARD domain). Interacts (via CARD domain) with CASP2; inhibits CASP2 activity in a phosphorylation-dependent manner. Interacts with CASP8; decreases CASP8 activity in a mitochondria localization-and phosphorylation-dependent manner and this interaction is dissociated by calcium. Interacts with TFPT; translocates NOL3 into the nucleus and negatively regulated TFPT-induced cell death (By similarity).

Interacts directly (via CARD domain) with FAS and FADD (via DED domain); inhibits death-inducing signaling complex death-inducing signaling complex (DISC) assembly by inhibiting the increase in FAS-FADD binding induced by FAS activation (By similarity). Interacts (via CARD domain) with BAX (via a C-terminal 33 residues); inhibits BAX activation and translocation and consequently cytochrome c release from mitochondria. Interacts with PPM1G; may dephosphorylate NOL3 (By similarity). Interacts (via CARD domain) with BBC3 (via BH3 domain); preventing the association of BBC3 with BCL2 and resulting in activation of CASP8 (By similarity). Interacts (via CARD domain) with BAD (via BH3 domain); preventing the association of BAD with BCL2 (By similarity). Interacts directly (via CARD domain) with TNFRSF1A; inhibits TNF-signaling pathway (By similarity). Isoform 1 binds to SFRS9/SRp30C.

Post-translational Modifications: Phosphorylation at Thr-149 is required for its antiapoptotic effect by blocking death-inducing signaling complex death-inducing signaling complex (DISC) activity through the control of interaction with CASP8. Phosphorylation at Thr-149 results in translocation to mitochondria and this translocation enables the binding to CASP8. Dephosphorylated at Thr-149 by calcineurin; doesn't inhibit the association between FADD and CASP8 and the consequent apoptosis. Polyubiquitinated by MDM2; promoting proteasomal-dependent degradation in response to apoptotic stimuli.

Similarity: CARD is critical for both extrinsic and intrinsic apoptotic pathways (By similarity). CARD domain mediates a protective effect against myocardial ischemia/reperfusion, oxidative stress and TNF-induced necrosis (PubMed:15004034) (By similarity). The calcium binding domain plays a protective role in calcium-mediated cell death (PubMed:15509781).

NCBI AND UNIPROT INFORMATION

NCBI GI #	297632352
NCBI GeneID	8996
NCBI Accession #	NP_001171986.1
NCBI GenBank Nucleotide #	NM_001185057.2
UniProt Accession #	O60936 ; O60937 ; B4DFLO
Molecular Weight	Observed: 23 kDa Predicted: 23 kDa
NCBI Official Full Name	nucleolar protein 3 isoform Nop30
NCBI Official Synonym Full Names	nucleolar protein 3
NCBI Official Symbol	NOL3
NCBI Official Synonym Symbols	ARC; FCM; MYP; NOP; NOP30
NCBI Protein Information	nucleolar protein 3
UniProt Protein Name	Nucleolar protein 3

UniProt Gene Name	NOL3
UniProt Synonym Gene Names	ARC1 PublicationManual assertion based on opinion iniRef.1; Nop301 PublicationManual assertion based on opinion iniRef.2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/arc-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/320768>