ARG56507
anti-ARC / NOL3 antibody

Package: 250 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ARC / NOL3
Tested Reactivity	Hu, Ms
Tested Application	IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ARC / NOL3
Species	Human
Immunogen	Synthetic peptide around aa. 191-208 of Human ARC / NOL3. (PDPEPEPDFEERDESEDS)
Conjugation	Un-conjugated
Alternate Names	Apoptosis repressor with CARD; MYP; Nucleolar protein of 30 kDa; ARC; Myp; Muscle-enriched cytoplasmic protein; Nop30; NOP; FCM; Nucleolar protein 3; NOP30

Application Instructions

Application table

Application	Dilution
IP	Assay-dependent
WB	1:200

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

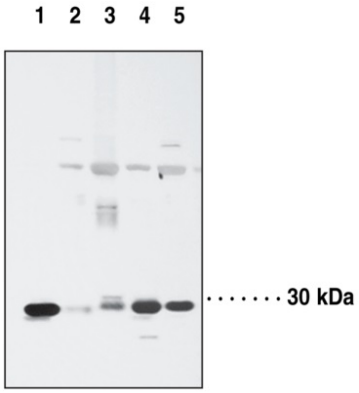
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.2) and 0.02% Sodium azide.
Preservative	0.02% Sodium azide.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 11838 Mouse

	GeneID: 23237 Human
	Swiss-port # Q7LC44 Human
	Swiss-port # Q9WV31 Mouse
Gene Symbol	NOL3
Gene Full Name	nucleolar protein 3 (apoptosis repressor with CARD domain)
Background	This gene encodes an anti-apoptotic protein that has been shown to down-regulate the enzyme activities of caspase 2, caspase 8 and tumor protein p53. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]
Function	Isoform 1: May be involved in RNA splicing. Isoform 2: Functions as an apoptosis repressor that blocks multiple modes of cell death. Inhibits extrinsic apoptotic pathways through two different ways. Firstly by interacting with FAS and FADD upon FAS activation blocking death-inducing signaling complex (DISC) assembly (By similarity). Secondly by interacting with CASP8 in a mitochondria localization- and phosphorylation-dependent manner, limiting the amount of soluble CASP8 available for DISC-mediated activation (By similarity). Inhibits intrinsic apoptotic pathway in response to a wide range of stresses, through its interaction with BAX resulting in BAX inactivation, preventing mitochondrial dysfunction and release of pro-apoptotic factors (PubMed:15004034). Inhibits calcium-mediated cell death by functioning as a cytosolic calcium buffer, dissociating its interaction with CASP8 and maintaining calcium homeostasis (PubMed:15509781). Negatively regulates oxidative stress-induced apoptosis by phosphorylation-dependent suppression of the mitochondria-mediated intrinsic pathway, by blocking CASP2 activation and BAX translocation (By similarity). Negatively regulates hypoxia-induced apoptosis in part by inhibiting the release of cytochrome c from mitochondria in a caspase-independent manner (By similarity). Also inhibits TNF-induced necrosis by preventing TNF-signaling pathway through TNFRSF1A interaction abrogating the recruitment of RIPK1 to complex I (By similarity). Finally through its role as apoptosis repressor, promotes vascular remodeling through inhibition of apoptosis and stimulation of proliferation, in response to hypoxia (By similarity). Inhibits too myoblast differentiation through caspase inhibition (By similarity). [UniProt]
Highlight	Related products: ARC antibodies; ARC ELISA Kits; Anti-Rabbit IgG secondary antibodies; Related news: Viral-like capsids, new trans-synaptic mRNA transport mechanism
Calculated Mw	23 kDa
PTM	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. [UniProt]
Cellular Localization	Isoform 1: Nucleolus. Note: The SR-rich C-terminus mediates nuclear localization. Isoform 2: Mitochondrion, Cytoplasm, Sarcoplasmic reticulum and Membrane. Note: Phosphorylation at Thr-149 results in translocation to mitochondria. Colocalized with mitochondria in response to oxidative stress. [UniProt]

Images



ARG56507 anti-ARC / NOL3 antibody WB image

Western blot: 1) Mouse cerebrum, 2) Mouse liver, 3) Mouse heart, 4) Mouse smooth muscle, and 5) Mouse lung stained with ARG56507 anti-ARC / NOL3 antibody.