

ARG43202 anti-NLRP1 / NALP1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NLRP1 / NALP1
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NLRP1 / NALP1
Species	Human
Immunogen	A 13-amino acid peptide within the last 50 amino acids of Human NLRP1 / NALP1.
Conjugation	Un-conjugated
Alternate Names	NAC; PP1044; DEFCAP; SLEV1; VAMAS1; Nucleotide-binding domain and caspase recruitment domain; DEFCAP-L/S; NALP1; NACHT, LRR and PYD domains-containing protein 1; Death effector filament-forming ced-4-like apoptosis protein; CLR17.1; Caspase recruitment domain-containing protein 7; CIDEA; CARD7

Application Instructions

Application table	Application	Dilution
	ICC/IF	10 - 20 µg/ml
	WB	1 - 4 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	U937	
Observed Size	~ 160 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS and 0.02% Sodium azide.
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
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 or below. 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

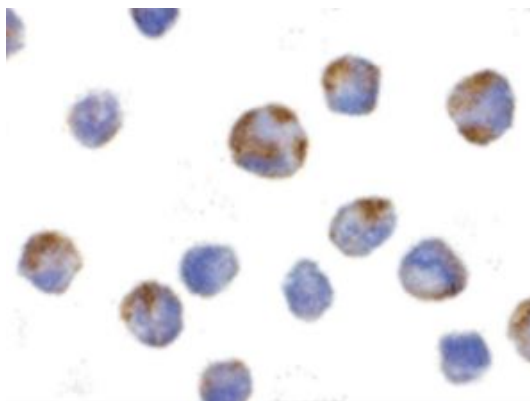
before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

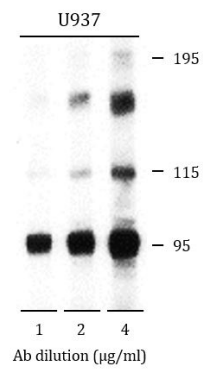
Gene Symbol	NLRP1
Gene Full Name	NLR family, pyrin domain containing 1
Background	<p>This gene encodes a member of the Ced-4 family of apoptosis proteins. Ced-family members contain a caspase recruitment domain (CARD) and are known to be key mediators of programmed cell death. The encoded protein contains a distinct N-terminal pyrin-like motif, which is possibly involved in protein-protein interactions. This protein interacts strongly with caspase 2 and weakly with caspase 9. Overexpression of this gene was demonstrated to induce apoptosis in cells. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene, but the biological validity of some variants has not been determined. [provided by RefSeq, Jul 2008]</p>
Function	<p>As the sensor component of the NLRP1 inflammasome, plays a crucial role in innate immunity and inflammation. In response to pathogens and other damage-associated signals, initiates the formation of the inflammasome polymeric complex, made of NLRP1, CASP1, and possibly PYCARD. Recruitment of proCASP1 to the inflammasome promotes its activation and CASP1-catalyzed IL1B and IL18 maturation and secretion in the extracellular milieu. Activation of NLRP1 inflammasome is also required for HMGB1 secretion. The active cytokines and HMGB1 stimulate inflammatory responses. Inflammasomes can also induce pyroptosis, an inflammatory form of programmed cell death (PubMed:22665479, PubMed:17418785). May be activated by muramyl dipeptide (MDP), a fragment of bacterial peptidoglycan, in a NOD2-dependent manner (PubMed:18511561). Contrary to its mouse ortholog, not activated by Bacillus anthracis lethal toxin (PubMed:19651869). It is unclear whether isoform 2 is involved in inflammasome formation. It is not cleaved within the FIIND domain, does not assemble into specks, nor promote IL1B release (PubMed:22665479). However, in an vitro cell-free system, it has been shown to be activated by MDP (PubMed:17349957). Binds ATP (PubMed:11113115, PubMed:15212762). [UniProt]</p>
Calculated Mw	166 kDa
Cellular Localization	<p>Cytoplasm, cytosol. Cytoplasm. Inflammasome. Nucleus. Note=Nucleocytoplasmic distribution in lymphoid organs (probably in T-cells) and in neurons. In epithelial cells, predominantly cytoplasmic. [UniProt]</p>

Images



ARG43202 anti-NLRP1 / NALP1 antibody ICC image

Immunocytochemistry: K562 cells stained with ARG43202 anti-NLRP1 / NALP1 antibody at 10 µg/ml dilution.



ARG43202 anti-NLRP1 / NALP1 antibody WB image

Western blot: U937 cell lysate stained with ARG43202 anti-NLRP1 / NALP1 antibody at 1, 2 and 4 µg/ml dilution (left to right).