For Research Use Only

NLRP3 Polyclonal antibody

Catalog Number:19771-1-AP Featured Product 432 Publications

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Basic Information

Catalog Number:
19771-1-AP

Size:
150ul , Concentration: 600 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_001127461

GeneID (NCBI):
114548

UNIPROT ID:
Q96P20

Full Name:
NLR family, pyrin domain containing 3

Calculated MW:
118 kDa

Observed MW:
110 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:50-1:500
IF 1:50-1:500

Applications

Tested Applications:
WB, IF, FC, IHC, ELISA

Cited Applications:
WB, IP, IF, IHC, CoIP, ELISA, Cell treatment

Species Specificity:
human

Cited Species:
human, goat, chicken, pig, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : Raji cells, THP-1 cells

IHC : human kidney tissue,

IF : HepG2 cells,

Background Information

NALP3, also named C1orf7, CIAS1, and PYPAF1, belongs to the NLRP family. NLRP3, a key and eponymous component of the NLRP3 inflammasome, plays a crucial role in innate immunity and inflammation. NALP3 may function as an inducer of apoptosis. It interacts selectively with ASC and this complex may function as an upstream activator of NF-kappa-B signaling.NALP3 inhibits TNF-alpha-induced activation and nuclear translocation of RELA/NF-KB p65. Also inhibits transcriptional activity of RELA. NALP3 activates caspase-1 in response to a number of triggers including bacterial or viral infection which leads to processing and release of IL1B and IL18. Defects in NLRP3 are the cause of familial cold autoinflammatory syndrome type 1 (FCAS1) which is also known as familial cold urticaria. Defects in NLRP3 are a cause of Muckle-Wells syndrome (MWS) which is urticaria-deafness-amyloidosis syndrome. Defects in NLRP3 are the cause of chronic infantile neurologic cutaneous and articular syndrome (CINCA) which is also known as neonatal onset multisystem inflammatory disease (NOMID). The antibody recognizes the C-term of NALP3.

Notable Publications

Author	Pubmed ID	Journal	Application
Yang Liu	36175851	BMC Mol Cell Biol	IF
Lin-Tao Xu	34601084	J Ethnopharmacol	WB
DANDAN FENG	34650637	Exp Ther Med	WB

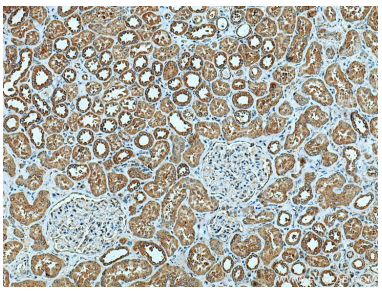
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

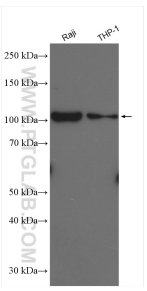
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

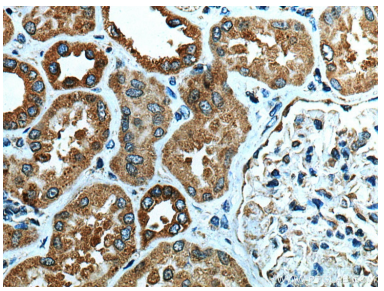
Selected Validation Data



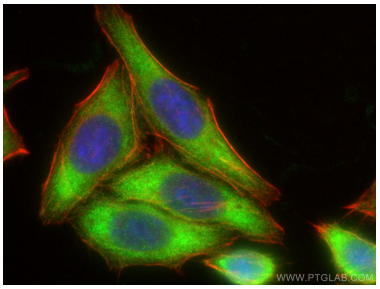
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 19771-1-AP (NLRP3 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



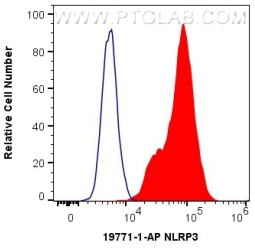
Various lysates were subjected to SDS PAGE followed by western blot with 19771-1-AP (NLRP3 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



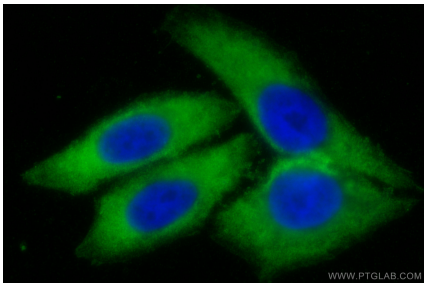
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 19771-1-AP (NLRP3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using NLRP3 antibody (19771-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



1X10^6 THP-1 cells were intracellularly stained with 0.4 ug Anti-Human NLRP3 (19771-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using NLRP3 antibody (19771-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).