

For Research Use Only

Nlrp3 Polyclonal antibody

Catalog Number: 30109-1-AP **1 Publications**



Basic Information

Catalog Number: 30109-1-AP	GenBank Accession Number: NM_145827	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 800 µg/ml by Nanodrop;	GeneID (NCBI): 216799	Recommended Dilutions: WB 1:1000-1:5000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IF 1:200-1:800
Source: Rabbit	UNIPROT ID: Q8R4B8	
Isotype: IgG	Full Name: NLR family, pyrin domain containing 3	
Immunogen Catalog Number: AG32515	Calculated MW: 118kd	
	Observed MW: 108-120 kDa	

Applications

Tested Applications: WB, IP, IF, ELISA	Positive Controls:
Cited Applications: WB	WB: J774A.1 cells, rat spleen tissue, RAW 264.7 cells, THP-1 cells, LPS treated RAW 264.7 cells
Species Specificity: Human, mouse, rat	IP: RAW 264.7 cells,
Cited Species: human	IF: HepG2 cells,

Background Information

NLRP3, also named as NALP3, CIASI, C1orf7, PYPAF1, Cryopyrin and MIM606416, belongs to NLR family. NLRP3, a key and eponymous component of the NLRP3 inflammasome, plays a crucial role in innate immunity and inflammation. NLRP3 inflammasome is expressed in immune cells, including monocytes, macrophages, and dendritic cells. When the NLRP3 inflammasome is activated, the PYD domain of NLRP3 mediates recruitment of an adaptor protein called ASC and the effector protein procaspase-1 to form an NLRP3 inflammasome complex that can cleave inactive procaspase-1 to form active caspase-1. And then the active caspase-1 results in secretion of interleukin (IL)-18 and IL-1 β . Activation of the NLRP3 inflammasome is also required for HMGB1 secretion. Inflammasomes can also induce pyroptosis, an inflammatory form of programmed cell death (PMID:27669650). NLRP3 has some isoforms with the MW of 106-118 kDa and 75-83 kDa. An additional 130-135 kDa band could also be detected (PMID: 17164409; PMID: 34680443; PMID: 35585627). This antibody is specific for mouse Nlrp3.

Notable Publications

Author	Pubmed ID	Journal	Application
Meixin Zhang	37791316	JACC Basic Transl Sci	WB

Storage

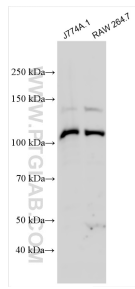
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

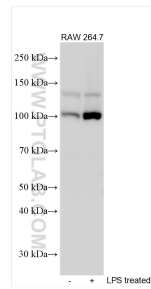
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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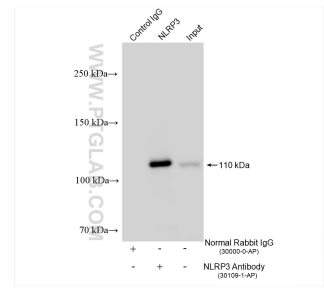
Selected Validation Data



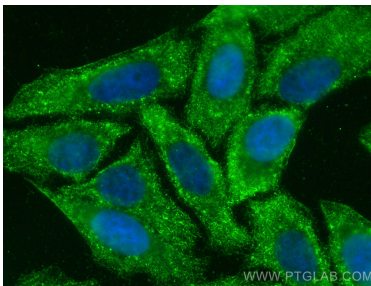
Various lysates were subjected to SDS PAGE followed by western blot with 30109-1-AP (Nlrp3 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



Non-treated RAW 264.7 cells and LPS-treated RAW 264.7 cells lysates were subjected to SDS PAGE followed by western blot with 30109-1-AP (Nlrp3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



IP result of anti-Nlrp3 (IP:30109-1-AP, 4ug; Detection:30109-1-AP 1:4000) with RAW 264.7 cells lysate 1200 ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Nlrp3 antibody (30109-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).