

NLRP3 Rabbit mAb

Catalog No: #52107

Package Size: #52107-1 50ul #52107-2 100ul

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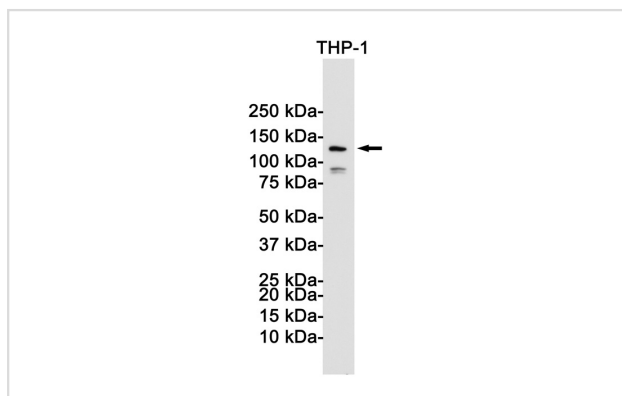
Description

Product Name	NLRP3 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S07-9E9
Isotype	Rabbit IgG
Purification	Affinity Purified
Applications	WB
Species Reactivity	Human,Mouse,Rat
Immunogen Description	Recombinant protein of human NLRP3
Conjugates	Unconjugated
Modification	Unmodification
Other Names	FCU; MWS; FCAS; Cias1; Mmig1; NLRP3; Pypaf1; Ail/AVP; AGTAVPRL; Cryopyrin;
Accession No.	Swiss-Prot:Q96P20GeneID:114548
Uniprot	Q96P20
GeneID	114548
Calculated MW	Calculated MW: 118 kDa; Observed MW: 118 kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Application Details

WB: 1/1000

Images



Western blot detection of NLRP3 in THP-1 cell lysates using NLRP3 Rabbit mAb(1:1000 diluted).Predicted band size:118kDa.Observed band size:118kDa.

Background

Swiss-Prot Acc.Q96P20. As the sensor component of the NLRP3 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 NLRP3, PYCARD and CASP1 (and possibly CASP4 and CASP5). Recruitment of proCASP1 to the inflammasome promotes its activation and CASP1-catalyzed IL1B and IL18 maturation and secretion in the extracellular milieu. Activation of NLRP3 inflammasome is also required for HMGB1 secretion (PubMed:22801494). The active cytokines and HMGB1 stimulate inflammatory responses. Inflammasomes can also induce pyroptosis, an inflammatory form of programmed cell death. Under resting conditions, NLRP3 is autoinhibited. NLRP3 activation stimuli include extracellular ATP, reactive oxygen species, K⁺ efflux, crystals of monosodium urate or cholesterol, amyloid-beta fibers, environmental or industrial particles and nanoparticles, etc. However, it is unclear what constitutes the direct NLRP3 activator. Independently of inflammasome activation, regulates the differentiation of T helper 2 (Th2) cells and has a role in Th2 cell-dependent asthma and tumor growth. During Th2 differentiation, required for optimal IRF4 binding to IL4 promoter and for IRF4-dependent IL4 transcription. Binds to the consensus DNA sequence 5'-GRRGGNRGAG-3'. May also participate in the transcription of IL5, IL13, GATA3, CCR3, CCR4 and MAF.

Note: This product is for in vitro research use only