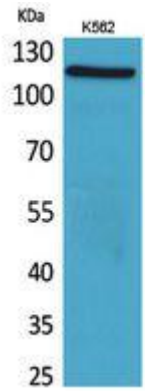
Cryopyrin Monoclonal Antibody

Catalog No	BYmab-00577
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	NLRP3
Protein Name	NACHT LRR and PYD domains-containing protein 3
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human NLRP3. AA range:511-560
Specificity	Cryopyrin Monoclonal Antibody detects endogenous levels of Cryopyrin protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	NLRP3; C1orf7; CIAS1; NALP3; PYPAF1; NACHT, LRR and PYD domains-containing protein 3; Angiotensin/vasopressin receptor AII/AVP-like; Caterpiller protein 1.1CLR1.1; Cold autoinflammatory syndrome 1 protein; Cryopyrin; PYRIN-containing APAF1-like protein 1
Observed Band	115kD
Cell Pathway	Cytoplasm, cytosol . Inflammasome . Endoplasmic reticulum . Secreted . Nucleus . In macrophages, under resting conditions, mainly located in the cytosol, on the endoplasmic reticulum. After stimulation with inducers of the NLRP3 inflammasome, mitochondria redistribute in the vicinity of the endoplasmic reticulum in the perinuclear region, which results in colocalization of NLRP3 on the endoplasmic reticulum and PYCARD on mitochondria, allowing the activation of inflammasome assembly. After the induction of pyroptosis, inflammasome specks are released into the extracellular space where they can further promote IL1B processing and where they can be engulfed by macrophages. Phagocytosis induces lysosomal damage and inflammasome activation in the recipient cells (PubMed:24952504). In the Th2 s

Tissue Specificity	Predominantly expressed in macrophages (PubMed:33231615, PubMed:34133077). Also expressed in dendritic cells, B- and T-cells (at protein level) (PubMed:11786556) (PubMed:17164409). Expressed in LPS-treated granulocytes, but not in resting cells (at protein level) (PubMed:17164409). Expression in monocytes is very weak (at protein level) (PubMed:17164409). Expressed in stratified non-keratinizing squamous epithelium, including oral, esophageal and ectocervical mucosa and in the Hassall's corpuscles in the thymus. Also, detected in the stratified epithelium covering the bladder and ureter (transitional mucosa) (at protein level) (PubMed:17164409). Expressed in lung epithelial cells (at protein level) (PubMed:23229815). Expressed in chondrocytes (PubMed:12032915). Expressed at low levels in r
Function	disease:Defects in NLRP3 are a cause of Muckle-Wells syndrome (MWS) [MIM:191900]; also known as urticaria-deafness-amyloidosis syndrome. MWS is a hereditary periodic fever syndrome characterized by fever, chronic recurrent urticaria, arthralgias, progressive sensorineural deafness, and reactive renal amyloidosis. The disease may be severe if generalized amyloidosis occurs.,disease:Defects in NLRP3 are the cause of chronic infantile neurologic cutaneous and articular syndrome (CINCA) [MIM:607115]; also known as 'neonatal onset multisystem inflammatory disease,' or NOMID, a rare congenital inflammatory disorder characterized by a triad of neonatal onset of cutaneous symptoms, chronic meningitis, and joint manifestations with recurrent fever and inflammation.,disease:Defects in NLRP3 are the cause of familial cold autoinflammatory syndrome type 1 (FCAS1) [MIM:120100]; commonly known as fami
Background	This gene encodes a pyrin-like protein containing a pyrin domain, a nucleotide-binding site (NBS) domain, and a leucine-rich repeat (LRR) motif. This protein interacts with the apoptosis-associated speck-like protein PYCARD/ASC, which contains a caspase recruitment domain, and is a member of the NALP3 inflammasome complex. This complex functions as an upstream activator of NF-kapMAB signaling, and it plays a role in the regulation of inflammation, the immune response, and apoptosis. Mutations in this gene are associated with familial cold autoinflammatory syndrome (FCAS), Muckle-Wells syndrome (MWS), chronic infantile neurological cutaneous and articular (CINCA) syndrome, and neonatal-onset multisystem inflammatory disease (NOMID). Multiple alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. Alternative 5' UTR structures are s
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Cryopyrin Monoclonal Antibody