

Datasheet for ABIN1169100

anti-NLRP3 antibody (Pyrin Domain)**5** Images**60** Publications[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	NLRP3
Binding Specificity:	AA 1-93, Pyrin Domain
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This NLRP3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	Recombinant mouse NLRP3/NALP3 (pyrin domain) (aa 1-93).
Clone:	Cryo-2
Isotype:	IgG2b
Specificity:	Recognizes mouse and human NLRP3/NALP3.
Cross-Reactivity:	Human, Mouse (Murine)
Purification:	Purified from concentrated hybridoma tissue culture supernatant.
Purity:	>95 % (SDS-PAGE)

Target Details

Target:	NLRP3
Alternative Name:	NLRP3/NALP3 (NLRP3 Products)
Background:	The inflammasome is a multiprotein complex that mediates the activation of caspase-1, which promotes, amongst others, the secretion of the proinflammatory cytokines interleukin (IL)-1beta and IL-18. Members of the Nod-like receptor family, including NLRP3/NALP3, are critical components of the inflammasome that link danger-signals to caspase-1 activation. Defects in NLRP3 are the cause of familial cold autoinflammatory syndrome type 1 (FCAS1), Muckle-Wells syndrome (MWS) and of chronic infantile neurologic cutaneous and articular syndrome (CINCA).
UniProt:	Q8R4B8
Pathways:	Cellular Response to Molecule of Bacterial Origin , Positive Regulation of Endopeptidase Activity , Inflammasome

Application Details

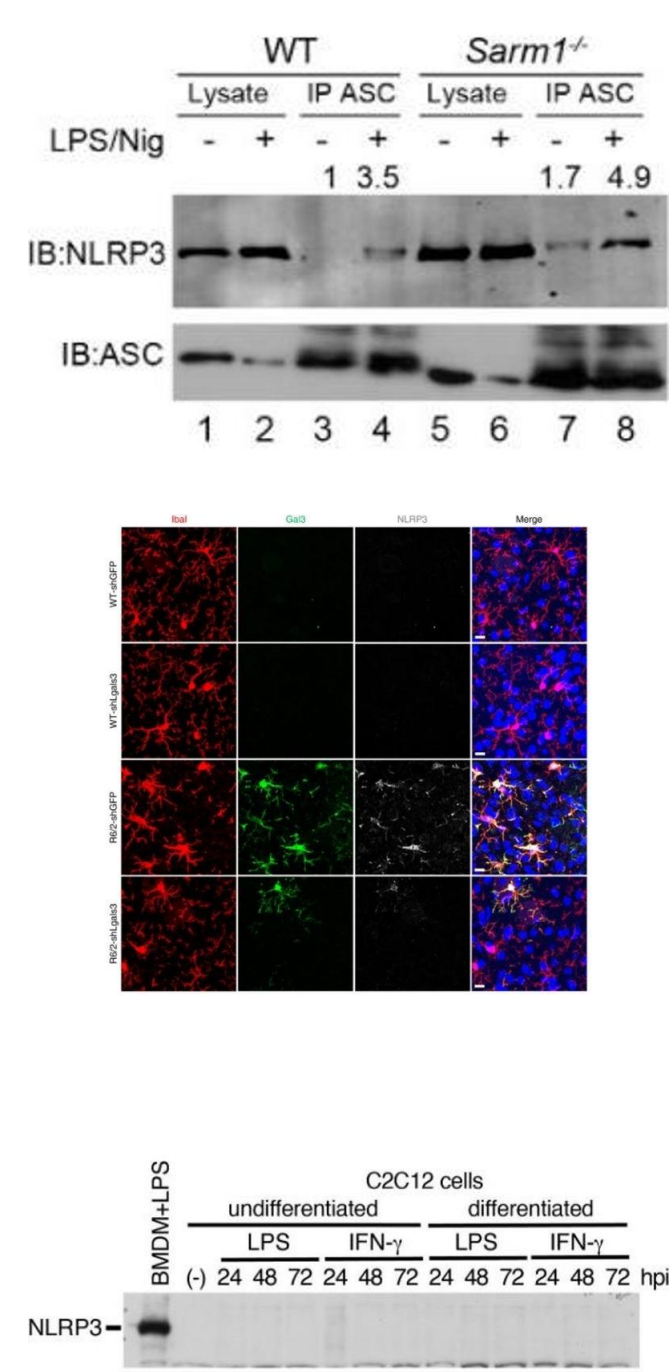
Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	In PBS containing 10 % glycerol and 0.02 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	Short Term Storage: +4°C Long Term Storage: -20°C Stable for at least 1 year after receipt when stored at -20°C.
Expiry Date:	12 months

Publications

- Product cited in: Zhu, Tang: "LncRNA Gm14205 induces astrocytic NLRP3 inflammasome activation via inhibiting oxytocin receptor in postpartum depression." in: **Bioscience reports**, Vol. 40, Issue 8, (2020) ([PubMed](#)).
- Wong, Lewis, Doherty, Shi, Cashikar, Amelanchik, Tymchuk, Sullivan, Qian, Covey, Petsko, Holtzman, Paul, Luo: "25-Hydroxycholesterol amplifies microglial IL-1 β production in an apoE isoform-dependent manner." in: **Journal of neuroinflammation**, Vol. 17, Issue 1, pp. 192, (2020) ([PubMed](#)).
- Hoyle, Redondo-Castro, Cook, Tzeng, Allan, Brough, Lemarchand: "Hallmarks of NLRP3 inflammasome activation are observed in organotypic hippocampal slice culture." in: **Immunology**, Vol. 161, Issue 1, pp. 39-52, (2020) ([PubMed](#)).
- Shrivastava, Visoso-Carvajal, Garcia-Cordero, Leon-Juarez, Chavez-Munguia, Lopez, Nava, Villegas-Sepulveda, Cedillo-Barron: "Dengue Virus Serotype 2 and Its Non-Structural Proteins 2A and 2B Activate NLRP3 Inflammasome." in: **Frontiers in immunology**, Vol. 11, pp. 352, (2020) ([PubMed](#)).
- Wang, Hu, Wu, Feng, Li, Liu, Wang, Chen, Tian, Xiao, Zhang, Shereen, Chen, Pan, Wan, Wu, Wu: "STING promotes NLRP3 localization in ER and facilitates NLRP3 deubiquitination to activate the inflammasome upon HSV-1 infection." in: **PLoS pathogens**, Vol. 16, Issue 3, pp. e1008335, (2020) ([PubMed](#)).
- There are more publications referencing this product on: [Product page](#)



Protein Complex Immunoprecipitation

Image 1. Endogenous co-immunoprecipitation of ASC and NLRP3 in WT or *Sarm1*^{-/-} iBMDMs following NLRP3 inflammasome activation. Numbers above lanes indicate the fold increase in NLRP3 co-immunoprecipitated (IP'd) with ASC compared to WT unstimulated cells, as assessed by densitometry (NLRP3 IP'd as a fraction of ASC IP'd).

Immunofluorescence

Image 2. Immunofluorescence staining of mouse brain tissues

Western Blotting

Image 3. Mouse C2C12 myoblasts or the differentiated myocytes using horse serum were treated with LPS (1 μg/mL) or IFN-γ (100 ng/mL) for 24 to 72 h. The expression of NLRP3 in the cells were analyzed by immunoblotting with anti-NLRP3.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN1169100.