abcam

Product datasheet

Anti-NLRP3 antibody [EPR23073-96] - BSA and Azide free ab272702



リコンピナント

RabMAb

画像数 5

製品の概要

製品名 Anti-NLRP3 antibody [EPR23073-96] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR23073-96] to NLRP3 - BSA and Azide free

由来種 Rabbit

特異性 NLRP3 is related with inflammation and is cell-type dependent. This antibody detects no signal or

very weak signal in most normal natural samples. Stimulation may be required to allow detection

of the NLRP3 protein in most samples, as described in the literature (PMID: 29070054,

29434227, and 22569257).

アプリケーション 適用あり: ICC/IF, IP, WB

適用なし: Flow Cyt,IHC-Fr or IHC-P

種交差性 交差種: Mouse

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: RAW 264.7 (+/- treatment with LPS) and J774A.1 whole cell lysates. ICC/IF: RAW 264.7 (+/-

treatment with LPS) cells. IP: RAW 264.7 (+ treatment with LPS) whole cell lysate.

特記事項 ab272702 is the carrier-free version of ab270449.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-

based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP,

biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity

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- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPR23073-96

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab272702の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 118 kDa (predicted molecular weight: 118 kDa). Stimulation may be required to allow detection of the NLRP3 protein in most samples.

追加情報 Is unsuitable for Flow Cyt,IHC-Fr or IHC-P.

ターゲット情報

機能 May function as an inducer of apoptosis. Interacts selectively with ASC and this complex may

function as an upstream activator of NF-kappa-B signaling. Inhibits TNF-alpha induced activation and nuclear translocation of RELA/NF-KB p65. Also inhibits transcriptional activity of RELA. Activates caspase-1 in response to a number of triggers including bacterial or viral infection which

leads to processing and release of L1B and L18.

組織特異性 Expressed in blood leukocytes. Strongly expressed in polymorphonuclear cells and osteoblasts.

Undetectable or expressed at a lower magnitude in B- and T-lymphoblasts, respectively. High level of expression detected in chondrocytes. Detected in non-keratinizing epithelia of oropharynx,

関連疾患

esophagus and ectocervix and in the urothelial layer of the bladder.

Defects in NLRP3 are the cause of familial cold autoinflammatory syndrome type 1 (FCAS1) [MIM:120100]; also known as familial cold urticaria. FCAS are rare autosomal dominant systemic inflammatory diseases characterized by episodes of rash, arthralgia, fever and conjunctivitis after generalized exposure to cold.

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.

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 (NOMID). CINCA is 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.

配列類似件

Belongs to the NLRP family. Contains 1 DAPIN domain.

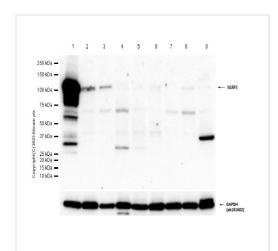
Contains 9 LRR (leucine-rich) repeats.

Contains 1 NACHT domain.

細胞内局在

Cytoplasm.

画像



Western blot - Anti-NLRP3 antibody [EPR23073-96]

- BSA and Azide free (ab272702)

All lanes : Anti-NLRP3 antibody [EPR23073-96] (<u>ab270449</u>) at 1/1000 dilution

Lane 1: Raw 264.7(Mouse Abelson murine leukemia virus-

induced tumor macrophage) whole cell lysate

Lane 2: Mouse thymus tissue lysate

Lane 3: Mouse lung tissue lysate

Lane 4: Mouse heart tissue lysate

Lane 5: Mouse kidney tissue lysate

Lane 6: Mouse brain tissue lysate

Lane 7: Mouse placenta tissue lysate

Lane 8: Mouse ovary tissue lysate

Lane 9: Mouse liver tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

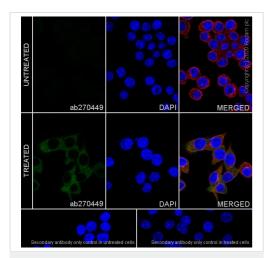
Predicted band size: 118 kDa **Observed band size:** 118 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab270449).

NLRP3 is expressed at a much low level in normal tissues (PMID: 33538177, PMID: 25524927, PMID: 20688930, PMID: 35676979, PMID: 31923221, PMID: 24166187).

Blocking and dilution buffer and concentration: 5% NFDM/TBST

Lane1-8:180 seconds

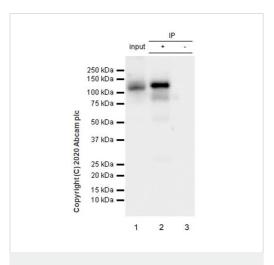


Immunocytochemistry/ Immunofluorescence - Anti-NLRP3 antibody [EPR23073-96] - BSA and Azide free (ab272702)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RAW 264.7 (untreated)(-) and RAW 264.7 (+LPS 10ug/ml 8h)(+) cells labelling NLRP3 with **ab270449** at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing cytoplasmic staining in RAW 264.7 after treatment with LPS. **ab195889** Anti-alpha Tubulin antibody (Alexa Fluor[®] 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) at 1/1000 (2 ug/ml) dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab270449</u>).



Immunoprecipitation - Anti-NLRP3 antibody
[EPR23073-96] - BSA and Azide free (ab272702)

NLRP3 was immunoprecipitated from 0.35 mg RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) (treated with 10 ug/ml Lipopolysaccharides (LPS) for 8 hours) whole cell lysate with ab270449 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab270449 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: RAW 264.7 treated with 10 ug/ml Lipopolysaccharides (LPS) for 8 hours, whole cell lysate 10 ug

Lane 2: <u>ab270449</u> IP in RAW 264.7 treated with 10 ug/ml Lipopolysaccharides(LPS) for 8 hours, whole cell lysate

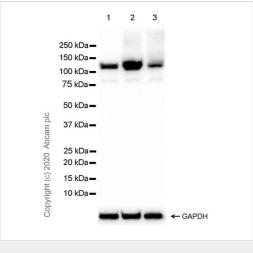
Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab270449</u> in RAW 264.7 treated with 10 ug/ml Lipopolysaccharides(LPS) for 8 hours, whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 24 seconds.

The band around 75kDa corresponds to the short form of NLRP3.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab270449).



Western blot - Anti-NLRP3 antibody [EPR23073-96]
- BSA and Azide free (ab272702)

All lanes : Anti-NLRP3 antibody [EPR23073-96] (**ab270449**) at 1/1000 dilution

Lane 1 : Untreated RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

Lane 2 : RAW 264.7 treated with 10 μ g/ml Lipopolysaccharides (LPS) for 8 hours whole cell lysate

Lane 3: J774A.1 (mouse reticulum cell sarcoma monocyte macrophage) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 118 kDa **Observed band size:** 118 kDa

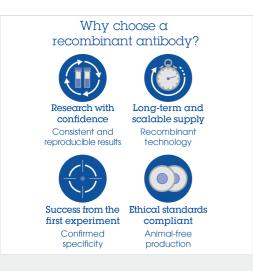
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The molecular weight/expression profile observed is consistent with what has been described in the literature (PMID:26939933, 30315268).

The band around 75kDa corresponds to the short form of NLRP3.

Exposure time: 54 seconds.

This data was develoed using the same antibody clone in a different buffer formulation containing PBS, glycerol, BSA and sodium azide (ab270449).



Anti-NLRP3 antibody [EPR23073-96] - BSA and Azide free (ab272702)

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