

Product datasheet

Anti-NLRP3 antibody [EPR20425] ab210491

Recombinant RabMAb

★★★★☆ 1 Abreviews 10 References 2 Images

Overview

Product name	Anti-NLRP3 antibody [EPR20425]
Description	Rabbit monoclonal [EPR20425] to NLRP3
Host species	Rabbit
Specificity	The level of NLRP3 expression can be elevated when cells are treated with LPS, as described in the literature (PMID: 22569257).
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment within Human NLRP3 aa 1-250. The exact sequence is proprietary. Database link: Q96P20
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20425
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab210491** in the following tested applications.

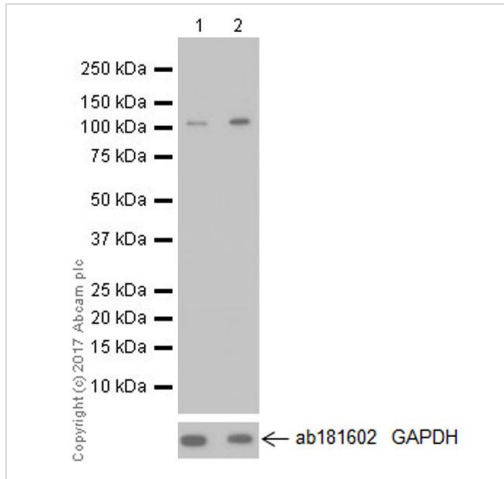
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/5000. Detects a band of approximately 118 kDa (predicted molecular weight: 118 kDa). Blocking/Dilution buffer: 5% Non-Fat Dry Milk/TBST.

Target

Function	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 IL1B and IL18.
Tissue specificity	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, esophagus and ectocervix and in the urothelial layer of the bladder.
Involvement in disease	<p>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.</p> <p>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.</p> <p>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.</p>
Sequence similarities	Belongs to the NLRP family. Contains 1 DAPIN domain. Contains 9 LRR (leucine-rich) repeats. Contains 1 NACHT domain.
Cellular localization	Cytoplasm.

Images



Western blot - Anti-NLRP3 antibody [EPR20425] (ab210491)

All lanes : Anti-NLRP3 antibody [EPR20425] (ab210491) at 1/5000 dilution

Lane 1 : Untreated RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 2 : RAW 264.7 treated with 100 ng/ml lipopolysaccharides (LPS) for 6 hours, whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 118 kDa

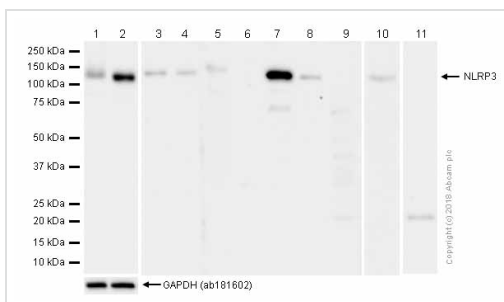
Observed band size: 118 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: 15 seconds.

The level of NLRP3 expression can be elevated when cells are treated with LPS, as described in the literature (PMID: 22569257).



Western blot - Anti-NLRP3 antibody [EPR20425] (ab210491)

All lanes : Anti-NLRP3 antibody [EPR20425] (ab210491) at 1/1000 dilution

Lane 1 : THP-1 (Human monocytic leukemia monocyte) whole cell lysates

Lane 2 : THP-1 (Human monocytic leukemia monocyte) treated with 100 ng/ml lipopolysaccharides for 3 hours whole cell lysates

Lane 3 : Mouse lung lysates

Lane 4 : Mouse thymus lysates

Lane 5 : Mouse spleen lysates

Lane 6 : Mouse kidney lysates

Lane 7 : Rat thymus lysates

Lane 8 : Rat lung lysates

Lane 9 : Rat spleen lysates

Lane 10 : Mouse hippocampus lysates

Lane 11 : Rat heart lysates

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 118 kDa

Blocking/Dilution buffer: 5% NFDm/TBST

Exposure time:

Lane 1 and 2: 10 seconds

Lane 3 to 11: 37 seconds

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