Product datasheet

Anti-NLRP3 antibody ab214185

Overview

Product name: Anti-NLRP3 antibody

Description: Rabbit polyclonal to NLRP3

Host species: Rabbit

Tested applications: Suitable for: IHC-P, WB

Species reactivity: Reacts with: Mouse, Rat, Human

Immunogen: Synthetic peptide within Human NLRP3 aa 1-50 conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary.

Sequence:

MKMASTRCKL ARYLEDLEDV DLKKFKMHLE
DYPPQKCICP LPRGQTEKAD

Database link: Q96P20

Positive control: IHC-P: Human lung carcinoma tissue. Mouse intestine and embryo tissue. Rat spinal cord and kidney tissue. WB: HeLa, SiHa and MDA-MB-231 cell lysate.

Properties

Form: Liquid


Storage buffer: Preservative: 0.09% Sodium azide

Purity: Protein A purified

Clonality: Polyclonal

Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab214185 in the following tested applications.

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

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 (ab214185)

Anti-NLRP3 antibody (ab214185) at 1/300 dilution + HeLa cell lysate

Secondary
Goat anti-rabbit IgG (H+L), HRP conjugated at 1/5000 dilution

Immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded mouse embryo tissue sections labeling NLRP3 using ab214185 at a 1/200 dilution. DAB staining.
Immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded mouse intestine tissue sections labeling NLRP3 using ab214185 at a 1/200 dilution. DAB staining.

Immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded human lung carcinoma tissue sections labeling NLRP3 using ab214185 at a 1/200 dilution. DAB staining.

Immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded rat spinal cord tissue sections labeling NLRP3 using ab214185 at a 1/300 dilution.
Immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded mouse intestine tissue sections labeling NLRP3 using ab214185 at a 1/200 dilution. DAB staining.

Immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded rat kidney tissue sections labeling NLRP3 using ab214185 at a 1/200 dilution. DAB staining.

Western blot - Anti-NLRP3 antibody (ab214185)

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All lanes: Anti-NLRP3 antibody (ab214185) at 1/300 dilution

Lane 1: Raji (human Burkitt's lymphoma cell line) cell lysate
Lane 2: MDA-MB-231 (human breast adenocarcinoma cell line) cell lysate

Secondary
All lanes: HRP conjugated goat anti-rabbit IgG at 1/5000 dilution
Anti-NLRP3 antibody (ab214185) at 1/300 dilution + SiHa (Human cervical carcinoma cell line) cell lysate

Secondary
HRP-conjugated goat anti-rabbit IgG

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