

Cryopyrin (6F12): sc-134306

BACKGROUND

Cryopyrin interacts selectively with apoptosis-associated specklike protein containing a CARD domain (ASC). This complex may function as an upstream activator of NF κ B signaling and caspase-1 activation. The complex also inhibits TNF α induced activation and nuclear translocation of RelA/NF κ B p65. Mutations in Cryopyrin and Pyrin proteins are responsible for several autoinflammatory disorders in humans, including familial cold autoinflammatory syndrome (FCAS), Muckle-Wells syndrome (MWS) and chronic infantile neurological cutaneous and articular syndrome (CINCA).

REFERENCES

1. Dode, C., et al. 2002. New mutations of CIAS1 that are responsible for Muckle-Wells syndrome and familial cold urticaria: a novel mutation underlies both syndromes. *Am. J. Hum. Genet.* 70: 1498-1506.
2. Feldmann, J., et al. 2002. Chronic infantile neurological cutaneous and articular syndrome is caused by mutations in CIAS1, a gene highly expressed in polymorphonuclear cells and chondrocytes. *Am. J. Hum. Genet.* 71: 198-203.

CHROMOSOMAL LOCATION

Genetic locus: NLRP3 (human) mapping to 1q44.

SOURCE

Cryopyrin (6F12) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the N-terminus of Cryopyrin of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Cryopyrin (6F12) is recommended for detection of Cryopyrin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Cryopyrin siRNA (h): sc-45469, Cryopyrin shRNA Plasmid (h): sc-45469-SH and Cryopyrin shRNA (h) Lentiviral Particles: sc-45469-V.

Molecular Weight of Cryopyrin: 106 kDa.

Positive Controls: human Cryopyrin transfected 293T whole cell lysate.

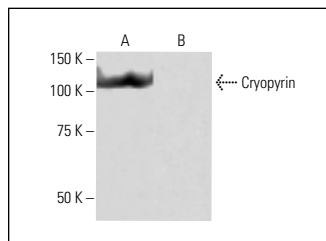
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Cryopyrin (6F12): sc-134306. Western blot analysis of Cryopyrin expression in human Cryopyrin transfected (A) and non-transfected (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Nagamatsu, K., et al. 2015. Dysregulation of *Escherichia coli* α -hemolysin expression alters the course of acute and persistent urinary tract infection. *Proc. Natl. Acad. Sci. USA* 112: E871-E880.
2. Zeng, J., et al. 2017. Isoliquiritigenin alleviates early brain injury after experimental intracerebral hemorrhage via suppressing Ros- and/or NF κ B-mediated NLRP3 inflammasome activation by promoting Nrf2 antioxidant pathway. *J. Neuroinflammation* 14: 119.
3. Park, M.H., et al. 2019. Mono-(2-ethylhexyl) phthalate aggravates inflammatory response via sirtuin regulation and inflammasome activation in RAW 264.7 cells. *Chem. Res. Toxicol.* 32: 935-942.
4. Li, H., et al. 2020. C-terminal binding proteins 1 and 2 in traumatic brain injury-induced inflammation and their inhibition as an approach for anti-inflammatory treatment. *Int. J. Biol. Sci.* 16: 1107-1120.
5. Wu, C.C., et al. 2020. β -funaltrexamine displayed anti-inflammatory and neuroprotective effects in cells and rat model of stroke. *Int. J. Mol. Sci.* 21: 3866.
6. Zhang, Y.Z., et al. 2020. Association between Nod-like receptor protein 3 inflammasome and gouty nephropathy. *Exp. Ther. Med.* 20: 195-204.
7. Riviere, E., et al. 2020. Melatonin daily oral supplementation attenuates inflammation and oxidative stress in testes of men with altered spermatogenesis of unknown aetiology. *Mol. Cell. Endocrinol.* 515: 110889.
8. Qiu, W.Q., et al. 2020. Lychee seed polyphenol inhibits A β -induced activation of NLRP3 inflammasome via the LRP1/AMPK mediated autophagy induction. *Biomed. Pharmacother.* 130: 110575.
9. Le, X., et al. 2020. DNA methylation downregulated ZDHHC1 suppresses tumor growth by altering cellular metabolism and inducing oxidative/ER stress-mediated apoptosis and pyroptosis. *Theranostics* 10: 9495-9511.

RESEARCH USE

For research use only, not for use in diagnostic procedures.