

# Pyrin (C-11): sc-390938

## BACKGROUND

Pyrin, also designated marenstrin or Mediterranean fever protein, controls the inflammatory response in myelomonocytic cells in cytoskeletal organization. Defects in the gene coding for Pyrin may cause Mediterranean fever, a hereditary autosomal recessive disorder characterized by recurrent fever, serosal inflammation and pain in the chest or abdomen. Pyrin is expressed in peripheral blood leukocytes (particularly in mature granulocytes) but not in lymphocytes. It can also be detected in spleen, muscle, lung and in several myeloid leukemic, colon cancer, and prostate cancer cell lines.

## REFERENCES

1. Dode, C., et al. 2000. Mutations in the MEFV gene in a large series of patients with a clinical diagnosis of familial Mediterranean fever. *Am. J. Med. Genet.* 92: 241-246.
2. Papin, S., et al. 2000. Alternative splicing at the MEFV locus involved in familial Mediterranean fever regulates translocation of the marenstrin/pyrin protein to the nucleus. *Hum. Mol. Genet.* 9: 3001-3009.
3. Centola, M., et al. 2000. The gene for familial Mediterranean fever, MEFV, is expressed in early leukocyte development and is regulated in response to inflammatory mediators. *Blood* 95: 3223-3231.
4. Aglipay, J.A., et al. 2003. A member of the Pyrin family, IFI16, is a novel BRCA1-associated protein involved in the p53-mediated apoptosis pathway. *Oncogene* 22: 8931-8938.

## CHROMOSOMAL LOCATION

Genetic locus: MEFV (human) mapping to 16p13.3.

## SOURCE

Pyrin (C-11) is a mouse monoclonal antibody raised against amino acids 231-368 mapping near the N-terminus of Pyrin of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Pyrin (C-11) is available conjugated to agarose (sc-390938 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390938 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390938 PE), fluorescein (sc-390938 FITC), Alexa Fluor® 488 (sc-390938 AF488), Alexa Fluor® 546 (sc-390938 AF546), Alexa Fluor® 594 (sc-390938 AF594) or Alexa Fluor® 647 (sc-390938 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390938 AF680) or Alexa Fluor® 790 (sc-390938 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## STORAGE

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

## APPLICATIONS

Pyrin (C-11) is recommended for detection of Pyrin of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Pyrin siRNA (h): sc-106466, Pyrin shRNA Plasmid (h): sc-106466-SH and Pyrin shRNA (h) Lentiviral Particles: sc-106466-V.

Molecular Weight of Pyrin: 86 kDa.

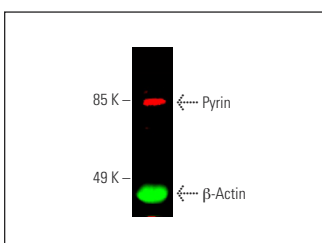
Positive Controls: SW480 cell lysate: sc-2219 or HeLa whole cell lysate: sc-2200.

## RECOMMENDED SUPPORT REAGENTS

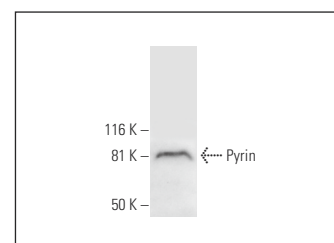
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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).
- 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Simultaneous direct near-infrared western blot analysis of Pyrin expression, detected with Pyrin (C-11) Alexa Fluor® 790: sc-390938 AF790 and β-Actin expression, detected with β-Actin (C4) Alexa Fluor® 680: sc-47778 AF680 in HeLa whole cell lysate. Blocked with UltraCruz® Blocking Reagent: sc-516214.



Pyrin (C-11): sc-390938. Western blot analysis of Pyrin expression in SW480 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Liu, Y.H., et al. 2018. The ATP-P2X<sub>7</sub> signaling axis is an essential sentinel for intracellular clostridium difficile pathogen-induced inflammasome activation. *Front. Cell. Infect. Microbiol.* 8: 84.
2. Lagrange, B., et al. 2018. Human caspase-4 detects tetra-acylated LPS and cytosolic *Francisella* and functions differently from murine caspase-11. *Nat. Commun.* 9: 242.

## RESEARCH USE

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