

# Cryopyrin (H-66): sc-66846

## BACKGROUND

Cryopyrin interacts selectively with apoptosis-associated specklike protein containing a CARD domain (ASC). This complex may function as an upstream activator of NF $\kappa$ B signaling and caspase-1 activation. The complex also inhibits TNF $\alpha$  induced activation and nuclear translocation of RelA/NF $\kappa$ 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. 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. 2002. Chronic infantile neurological cutaneous and articular syndrome is caused by mutations in CIAS1, a gene highly expressed in polyphosphonuclear cells and chondrocytes. *Am. J. Hum. Genet.* 71: 198-203.
3. Rosengren, S. 2005. Expression and regulation of cryopyrin and related proteins in rheumatoid arthritis synovium. *Ann. Rheum. Dis.* 64: 708-714.

## CHROMOSOMAL LOCATION

Genetic locus: NLRP3 (human) mapping to 1q44; Nlrp3 (mouse) mapping to 11 B1.3.

## SOURCE

Cryopyrin (H-66) is a rabbit polyclonal antibody raised against amino acids 25-90 mapping near the N-terminus of Cryopyrin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Cryopyrin (H-66) is recommended for detection of Cryopyrin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Cryopyrin (H-66) is also recommended for detection of Cryopyrin in additional species, including equine, canine, bovine and porcine.

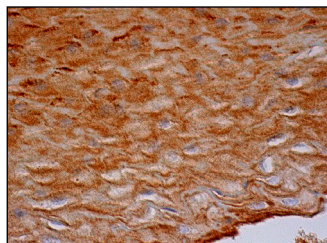
Suitable for use as control antibody for Cryopyrin siRNA (h): sc-45469, Cryopyrin siRNA (m): sc-45470, Cryopyrin shRNA Plasmid (h): sc-45469-SH, Cryopyrin shRNA Plasmid (m): sc-45470-SH, Cryopyrin shRNA (h) Lentiviral Particles: sc-45469-V and Cryopyrin shRNA (m) Lentiviral Particles: sc-45470-V.

Molecular Weight of Cryopyrin: 106 kDa.

## STORAGE

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

## DATA



Cryopyrin (H-66): sc-66846. Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of squamous epithelial cells

## SELECT PRODUCT CITATIONS

1. Nakamura, Y., et al. 2009. Mast cells mediate neutrophil recruitment and vascular leakage through the NLRP3 inflammasome in histamine-independent urticaria. *J. Exp. Med.* 206: 1037-1046.
2. Tsai, P.Y., et al. 2011. Epigallocatechin-3-gallate prevents lupus nephritis development in mice via enhancing the Nrf2 antioxidant pathway and inhibiting NLRP3 inflammasome activation. *Free Radic. Biol. Med.* 51: 744-754.
3. Yang, S.M., et al. 2013. Anthraquinone mitigates an accelerated and progressive IgA nephropathy model in mice by activating the Nrf2 pathway and inhibiting T cells and NLRP3 inflammasome. *Free Radic. Biol. Med.* 61: 285-297.
4. Hua, K.F., et al. 2013. Osteole mitigates progressive IgA nephropathy by inhibiting reactive oxygen species generation and NF $\kappa$ B/NLRP3 pathway. *PLoS ONE* 8: e77794.
5. Liang, Y., et al. 2015. Rifampicin attenuates rotenone-induced inflammation via suppressing NLRP3 inflammasome activation in microglia. *Brain Res.* 1622: 43-50.
6. Yang, C.S., et al. 2015. Small heterodimer partner interacts with NLRP3 and negatively regulates activation of the NLRP3 inflammasome. *Nat. Commun.* 6: 6115.

## RESEARCH USE

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

**MONOS**  
Satisfaction  
Guaranteed

Try **Cryopyrin (6F12): sc-134306**, our highly recommended monoclonal alternative to Cryopyrin (H-66).