

PYPAF7 (R-15): sc-30650

BACKGROUND

PYRIN-containing Apaf1-like proteins (PYPAFs) are members of the nucleotide-binding site/leucine-rich repeat (NBS/LRR) family of signal transduction proteins that function in apoptotic and inflammatory signaling pathways. PYPAF7, also known as Monarch-1, regulates activation of caspase-1 via ASC protein and promotes activation of NFκB via IKK. PYPAF7 enhances nonclassical and classical MHC class I expression at the level of the promoter, RNA, and protein expression. PYPAF7 is present in the cytoplasm of peripheral blood leukocytes, predominantly eosinophils and granulocytes, with lower levels in monocytes. The PYPAF7 gene maps to human chromosome 19q13.4.

REFERENCES

1. Wang, L., et al. 2002. PYPAF7, a novel PYRIN-containing Apaf1-like protein that regulates activation of NFκB and caspase-1-dependent cytokine processing. *J. Biol. Chem.* 277: 29874-29880.
2. Grenier, J.M., et al. 2002. Functional screening of five PYPAF family members identifies PYPAF5 as a novel regulator of NFκB and caspase-1. *FEBS Lett.* 530: 73-78.
3. Williams, K., et al. 2003. Cutting edge: Monarch-1: a pyrin/nucleotide-binding domain/leucine-rich repeat protein that controls classical and nonclassical MHC class I genes. *J. Immunol.* 170: 5354-5358.
4. Hasegawa, M., et al. 2005. ASC-mediated NFκB activation leading to IL-8 production requires caspase-8 and is inhibited by CLARP. *J. Biol. Chem.* 280: 15122-15130.
5. SWISS-PROT/TrEMBL (P59046). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: NALP12 (human) mapping to 19q13.41; Nalp12 (mouse) mapping to 7 A1.

SOURCE

PYPAF7 (R-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of PYPAF7 of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-30650 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

PYPAF7 (R-15) is recommended for detection of PYPAF7 isoforms 1 and 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 PYPAF7 siRNA (h): sc-45388, PYPAF7 siRNA (m): sc-45389, PYPAF7 shRNA Plasmid (h): sc-45388-SH, PYPAF7 shRNA Plasmid (m): sc-45389-SH, PYPAF7 shRNA (h) Lentiviral Particles: sc-45388-V and PYPAF7 shRNA (m) Lentiviral Particles: sc-45389-V.

Molecular Weight of PYPAF7: 120 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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



Try **PYPAF7 (A-3): sc-390666**, our highly recommended monoclonal alternative to PYPAF7 (R-15).