

POP2 (N-12): sc-243843

BACKGROUND

POP2 (pyrin-only protein 2), also known as PYDC2 (pyrin domain containing 2), is a 97 amino acid protein that contains one DAPIN domain. Localizing to cytoplasm and nucleus, POP2 is predominantly expressed in peripheral blood and weakly expressed in testis. POP2 inhibits NFκB p50 signaling distally by influencing the nuclear accumulation of NFκB p65. POP2 also disrupts the interaction between ASC and Cryopyrin. Binding to the pyrin domain of NALP2, POP2 prevents the recruitment of ASC, and thus, caspase-1 activation. POP2 also likely modulates caspase-1 activation downstream of other Nod-like receptors that contain a pyrin domain. Contrary to POP1, POP2 interacts weakly with the pyrin domain of ASC, suggesting that different POPs modulate inflammasome formation in response to different pathological stimuli. The gene that encodes POP2 maps to human chromosome 3q28.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PYDC2 (human) mapping to 3q28.

SOURCE

POP2 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of POP2 of human origin.

STORAGE

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

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-243843 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

POP2 (N-12) is recommended for detection of POP2 of 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); non cross-reactive with POP1 or POP5.

Molecular Weight of POP2: 11 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.

PROTOCOLS

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