

NFATc2IP (E-14): sc-165103

BACKGROUND

NFATc2IP (NFATc2-interacting protein), also known as NIP45, is a 419 amino acid protein that localizes to both the nucleus and the cytoplasm and contains one ubiquitin-like domain. Interacting with NFATc2, TRAF1 and TRAF2, NFATc2IP plays a role in the inducible expression of cytokines in T-cells, specifically by enhancing NFATc2-induced interleukin (IL) production. NFATc2IP exists as three alternatively spliced isoforms and is subject to post-translational methylation; an event which augments NFATc2IP-regulated cytokine production. The gene encoding NFATc2IP maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NFATC2IP (human) mapping to 16p11.2; Nfatc2ip (mouse) mapping to 7 F3.

SOURCE

NFATc2IP (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NFATc2IP 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-165103 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NFATc2IP (E-14) is recommended for detection of NFATc2IP of human origin and NIP45 of mouse 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).

NFATc2IP (E-14) is also recommended for detection of NFATc2IP in additional species, including canine and bovine.

Suitable for use as control antibody for NFATc2IP siRNA (h): sc-93159, NIP45 siRNA (m): sc-40773, NFATc2IP shRNA Plasmid (h): sc-93159-SH, NIP45 shRNA Plasmid (m): sc-40773-SH, NFATc2IP shRNA (h) Lentiviral Particles: sc-93159-V and NIP45 shRNA (m) Lentiviral Particles: sc-40773-V.

Molecular Weight (predicted) of NFATc2IP: 45 kDa.

Molecular Weight (observed) of NFATc2IP: 60 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.