SANTA CRUZ BIOTECHNOLOGY, INC.

TNFα-IP 8 (C-14): sc-82054

BACKGROUND

TNFα-IP 8 (tumor necrosis factor, α-induced protein 8), also known as NFκB-inducible DED-containing protein (NDED), SCC-S2 or TNF-induced protein GG2-1, is a 198 amino acid cytoplasmic protein induced by NFκB and TNF. The induction of TNFα-IP 8 by TNF is dependent on the activation of NFκB. TNFα-IP 8 negatively mediates apoptosis and may also play a role in tumor progression. TNFα-IP 8 specifically inhibits caspase-8 activity, which results in the inhibition of BID cleavage and caspase-3 activation during TNF-mediated apoptosis. TNFα-IP 8 is expressed at high levels in thymus, bone marrow, lymph node, spleen, thyroid, placenta and various tumor tissues, as well as fetal lung, liver and kidney. TNFα-IP 8 is present as three isoforms produced by alternative splicing.

REFERENCES

1. Horrevoets, et al. 1999. Vascular endothelial genes that are responsive to tumor necrosis factor-α *in vitro* are expressed in atherosclerotic lesions, including inhibitor of apoptosis protein-1, stannin, and two novel genes. Blood 93: 3418-3431.
2. Kumar, D., et al. 2000. Identification of a novel tumor necrosis factor-α-inducible gene, SCC-S2, containing the consensus sequence of a death effector domain of FAS-associated death domain-like interleukin-1β-converting enzyme-inhibitory protein. J. Biol. Chem. 275: 2973-2978.
3. Kumar, D., et al. 2004. Expression of SCC-S2, an antiapoptotic molecule, correlates with enhanced proliferation and tumorigenicity of MDA-MB 435 cells. Oncogene 23: 612-616.

CHROMOSOMAL LOCATION

Genetic locus: TNFAIP8 (human) mapping to 5q23.1; Tnfaip8 (mouse) mapping to 18 D1.

SOURCE

TNFα-IP 8 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TNFα-IP 8 of human 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-82054 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.

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.

APPLICATIONS

TNFα-IP 8 (C-14) is recommended for detection of TNFα-IP 8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

TNFα-IP 8 (C-14) is also recommended for detection of TNFα-IP 8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TNFα-IP 8 siRNA (h): sc-76698, TNFα-IP 8 siRNA (m): sc-76699, TNFα-IP 8 shRNA Plasmid (h): sc-76698-SH, TNFα-IP 8 shRNA Plasmid (m): sc-76699-SH, TNFα-IP 8 shRNA (h) Lentiviral Particles: sc-76698-V and TNFα-IP 8 shRNA (m) Lentiviral Particles: sc-76699-V.

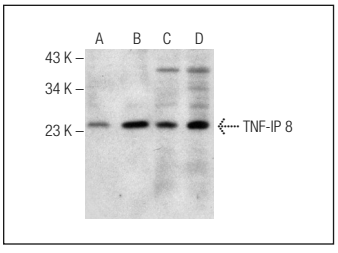
Molecular Weight of TNFα-IP 8: 23 kDa.

Positive Controls: TNF-IP 8 (h): 293T Lysate: sc-371558, A-431 whole cell lysate: sc-2201 or K-562 whole cell lysate: sc-2203.

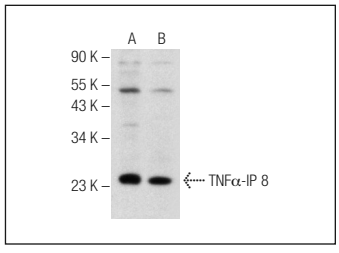
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TNFα-IP 8 (C-14): sc-82054. Western blot analysis of TNF-IP 8 expression in non-transfected 293T: sc-117752 (**A**), human TNF-IP 8 transfected 293T: sc-371558 (**B**), HUV-EC-C (**C**) and A549 (**D**) whole cell lysates.



TNFα-IP 8 (C-14): sc-82054. Western blot analysis of TNFα-IP 8 expression in K-562 (**A**) and A-431 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Shi, T.Y., et al. 2013. Functional variants in TNFAIP8 associated with cervical cancer susceptibility and clinical outcomes. Carcinogenesis 34: 770-778.