

# SNFT (N-15): sc-162247

## BACKGROUND

SNFT, also known as BATF3 (basic leucine zipper transcription factor, ATF-like 3), JUNDM1 or JDP1, is a 127 amino acid protein that localizes to the nucleus and contains one bZIP domain. Interacting with c-Jun, SNFT functions as a negative regulator of AP-1-mediated transcription, specifically by heterodimerizing with c-Jun and binding to DNA response elements. The gene encoding SNFT maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

1. Iacobelli, M., et al. 2000. Repression of IL-2 promoter activity by the novel basic leucine zipper p21SNFT protein. *J. Immunol.* 165: 860-868.
2. Bower, K.E., et al. 2002. Correlation of transcriptional repression by p21 (SNFT) with changes in DNA.NF-AT complex interactions. *J. Biol. Chem.* 277: 34967-34977.
3. Newman, J.R., et al. 2003. Comprehensive identification of human bZIP interactions with coiled-coil arrays. *Science* 300: 2097-2101.
4. Bower, K.E., et al. 2004. Transcriptional repression of MMP-1 by p21SNFT and reduced *in vitro* invasiveness of hepatocarcinoma cells. *Oncogene* 23: 8805-8814.
5. Hildner, K., et al. 2008. Batf3 deficiency reveals a critical role for CD8 $\alpha^+$  dendritic cells in cytotoxic T cell immunity. *Science* 322: 1097-1100.
6. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612470. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Schraml, B.U., et al. 2009. The AP-1 transcription factor Batf controls T(H)17 differentiation. *Nature* 460: 405-409.

## CHROMOSOMAL LOCATION

Genetic locus: BATF3 (human) mapping to 1q32.3.

## SOURCE

SNFT (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SNFT 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.

Blocking peptide available for competition studies, sc-162247 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-162247 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

SNFT (N-15) is recommended for detection of SNFT of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SNFT (N-15) is also recommended for detection of SNFT in additional species, including porcine.

Suitable for use as control antibody for SNFT siRNA (h): sc-88553, SNFT shRNA Plasmid (h): sc-88553-SH and SNFT shRNA (h) Lentiviral Particles: sc-88553-V.

SNFT (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

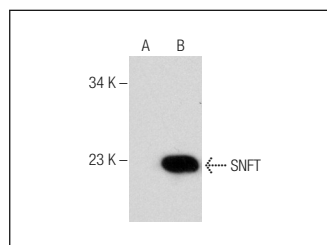
Molecular Weight of SNFT: 14 kDa.

Positive Controls: SNFT (h): 293T Lysate: sc-373308.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



SNFT (N-15): sc-162247. Western blot analysis of SNFT expression in non-transfected: sc-117752 (A) and human SNFT transfected: sc-373308 (B) 293T whole cell lysates.

## 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.