SNFT (D-6): sc-398902



The Power to Question

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

- lacobelli, M., et al. 2000. Repression of IL-2 promoter activity by the novel basic leucine zipper p21^{SNFT} 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.
- Newman, J.R. and Keating, A.E. 2003. Comprehensive identification of human bZIP interactions with coiled-coil arrays. Science 300: 2097-2101.
- Bower, K.E., et al. 2004. Transcriptional repression of MMP-1 by p21^{SNFT} and reduced *in vitro* invasiveness of hepatocarcinoma cells. Oncogene 23: 8805-8814.

CHROMOSOMAL LOCATION

Genetic locus: BATF3 (human) mapping to 1g32.3.

SOURCE

SNFT (D-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-19 at the N-terminus of SNFT of human origin.

PRODUCT

Each vial contains 200 μ g lgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-398902 X, 200 μ g/0.1 ml.

SNFT (D-6) is available conjugated to agarose (sc-398902 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398902 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398902 PE), fluorescein (sc-398902 FITC), Alexa Fluor* 488 (sc-398902 AF488), Alexa Fluor* 546 (sc-398902 AF546), Alexa Fluor* 594 (sc-398902 AF594) or Alexa Fluor* 647 (sc-398902 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor* 680 (sc-398902 AF680) or Alexa Fluor* 790 (sc-398902 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398902 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

SNFT (D-6) is recommended for detection of SNFT of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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)

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 (D-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

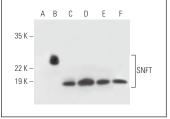
Molecular Weight of SNFT: 14 kDa.

Positive Controls: SNFT (h): 293T Lysate: sc-373308, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz* Blocking Reagent: sc-516214 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 m-lgG κ BP-FITC: sc-516140 or m-lgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz* Mounting Medium: sc-24941 or UltraCruz* Hard-set Mounting Medium: sc-359850.

DATA



SNFT (D-6): sc-398902. Western blot analysis of SNFT expression in non-transfected 293T: sc-117752 (A), human SNFT transfected 293T: sc-373308 (B), Jurkat (C), TK-1 (D), HT-1080 (E) and HeLa (F) 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.

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