

hSNF2H (D-10): sc-365727

BACKGROUND

The SWI/SNF complex is involved in the activation of transcription via the remodeling of nucleosome structure in an ATP-dependent manner. Brm (also designated SNF2a) and Brg-1 (also designated SNF2b) are the ATPase subunits of the mammalian SWI/SNF complex. Brm, Brg-1, Ini1 (integrase interactor 1, also designated SNF5), BAF155 (also designated SRG3) and BAF170 are thought to comprise the functional core of the SWI/SNF complex. Addition of Ini1, BAF155 and BAF170 to Brg-1 appears to increase remodeling activity. Other complex subunits are thought to play regulatory roles. hSNF2L and hSNF2H both appear to be homologs of *Drosophila* lsw1, a BRM related ATPase that is present in chromatin remodeling complexes other than SWI/SNF, including the NURF (nucleosome remodeling factor).

CHROMOSOMAL LOCATION

Genetic locus: SMARCA5 (human) mapping to 4q31.21; Smarca5 (mouse) mapping to 8 C2.

SOURCE

hSNF2H (D-10) is a mouse monoclonal antibody raised against amino acids 753-1052 of hSNF2H of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ 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-365727 X, 200 µg/0.1 ml.

hSNF2H (D-10) is available conjugated to agarose (sc-365727 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365727 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365727 PE), fluorescein (sc-365727 FITC), Alexa Fluor® 488 (sc-365727 AF488), Alexa Fluor® 546 (sc-365727 AF546), Alexa Fluor® 594 (sc-365727 AF594) or Alexa Fluor® 647 (sc-365727 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365727 AF680) or Alexa Fluor® 790 (sc-365727 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

hSNF2H (D-10) is recommended for detection of hSNF2H of mouse, rat and human origin by Western Blotting (starting dilution 1:1000, dilution range 1:1000-1:5000), 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).

Suitable for use as control antibody for hSNF2H siRNA (h): sc-35594, hSNF2H siRNA (m): sc-35595, hSNF2H shRNA Plasmid (h): sc-35594-SH, hSNF2H shRNA Plasmid (m): sc-35595-SH, hSNF2H shRNA (h) Lentiviral Particles: sc-35594-V and hSNF2H shRNA (m) Lentiviral Particles: sc-35595-V.

hSNF2H (D-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

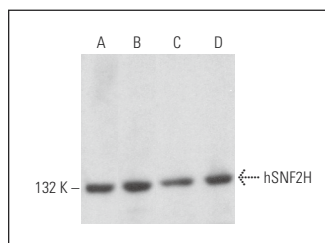
Molecular Weight of hSNF2H: 135 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, MCF7 whole cell lysate: sc-2206 or A-431 whole cell lysate: sc-2201.

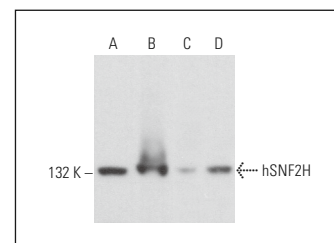
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



hSNF2H (D-10): sc-365727. Western blot analysis of hSNF2H expression in K-562 nuclear extract (A) and A-431 (B), MCF7 (C) and NTERA-2 cl.D1 (D) whole cell lysates.



hSNF2H (D-10): sc-365727. Western blot analysis of hSNF2H expression in SW480 (A), 3T3-L1 (B), SP2/O (C) and RPE-J (D) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Drosopoulos, W.C., et al. 2020. TRF2 mediates replication initiation within human telomeres to prevent telomere dysfunction. *Cell Rep.* 33: 108379.
2. Zhu, C., et al. 2022. Profilin-1 regulates DNA replication forks in a context-dependent fashion by interacting with SNF2H and BOD1L. *Nat. Commun.* 13: 6531.
3. Lerra, L., et al. 2024. An RNA-dependent and phase-separated active subnuclear compartment safeguards repressive chromatin domains. *Mol. Cell* 84: 1667-1683.e10.
4. Li, S., et al. 2024. USP3 promotes DNA damage response and chemotherapy resistance through stabilizing and deubiquitinating SMARCA5 in prostate cancer. *Cell Death Dis.* 15: 790.

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 for detailed protocols and support products.

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