

Ini1 (A-5): sc-166165

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 SNF2 α) and Brg-1 (also designated SNF2 β) 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* ISWI, a Brm related ATPase that is present in chromatin remodeling complexes other than SWI/SNF, including the NURF (nucleosome remodeling factor).

REFERENCES

- Muchardt, C., et al. 1993. A human homologue of *Saccharomyces cerevisiae* SNF2/SWI2 and *Drosophila* Brm genes potentiates transcriptional activation by the glucocorticoid receptor. *EMBO J.* 12: 4279-4290.
- Khavari, P.A., et al. 1993. BRG1 contains a conserved domain of the SWI2/SNF2 family necessary for normal mitotic growth and transcription. *Nature* 366: 170-174.
- Tsukiyama, T., et al. 1995. ISWI, a member of the SWI2/SNF2 ATPase family, encodes the 140 kDa subunit of the nucleosome remodeling factor. *Cell* 83: 1021-1026.

CHROMOSOMAL LOCATION

Genetic locus: SMARCB1 (human) mapping to 22q11.23; Smarcb1 (mouse) mapping to 10 C1.

SOURCE

Ini1 (A-5) is a mouse monoclonal antibody raised against amino acids 1-300 of Ini1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ 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-166165 X, 200 μ g/0.1 ml.

Ini1 (A-5) is available conjugated to agarose (sc-166165 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166165 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166165 PE), fluorescein (sc-166165 FITC), Alexa Fluor[®] 488 (sc-166165 AF488), Alexa Fluor[®] 546 (sc-166165 AF546), Alexa Fluor[®] 594 (sc-166165 AF594) or Alexa Fluor[®] 647 (sc-166165 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166165 AF680) or Alexa Fluor[®] 790 (sc-166165 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

Store at 4[°] C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Ini1 (A-5) is recommended for detection of Ini1 of mouse, rat and 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Ini1 (A-5) is also recommended for detection of Ini1 in additional species, including canine and porcine.

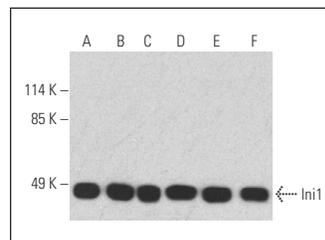
Suitable for use as control antibody for Ini1 siRNA (h): sc-35668, Ini1 siRNA (m): sc-35670, Ini1 shRNA Plasmid (h): sc-35668-SH, Ini1 shRNA Plasmid (m): sc-35670-SH, Ini1 shRNA (h) Lentiviral Particles: sc-35668-V and Ini1 shRNA (m) Lentiviral Particles: sc-35670-V.

Ini1 (A-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

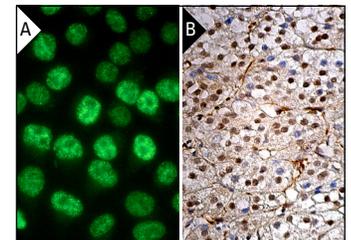
Molecular Weight of Ini1: 47 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or BYDP whole cell lysate: sc-364368.

DATA



Ini1 (A-5) HRP: sc-166165 HRP. Direct western blot analysis of Ini1 expression in K-562 (A), Jurkat (B) and Sol8 (C) nuclear extracts and PC-12 (D), BYDP (E) and WR19L (F) whole cell lysates.



Ini1 (A-5): sc-166165. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing nuclear staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Dykhuizen, E.C., et al. 2013. BAF complexes facilitate decatenation of DNA by topoisomerase II α . *Nature* 497: 624-627.
- Flynn, R.A., et al. 2016. 7SK-BAF axis controls pervasive transcription at enhancers. *Nat. Struct. Mol. Biol.* 23: 231-238.
- Morrison, E.A., et al. 2017. DNA binding drives the association of BRG1/hBRM bromodomains with nucleosomes. *Nat. Commun.* 8: 16080.
- Mashtalir, N., et al. 2018. Modular organization and assembly of SWI/SNF family chromatin remodeling complexes. *Cell* 175: 1272-1288.e20.
- Chang, L., et al. 2018. The SWI/SNF complex is a mechanoregulated inhibitor of YAP and TAZ. *Nature* 563: 265-269.

RESEARCH USE

For research use only, not for use in diagnostic procedures.