SANTA CRUZ BIOTECHNOLOGY, INC.

BAF155 (DXD7): sc-32763



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 SNF1 or SNF2 α) and Brg-1 (also designated SNF2 or 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).

CHROMOSOMAL LOCATION

Genetic locus: SMARCC1 (human) mapping to 3p21.31; Smarcc1 (mouse) mapping to 9 F2.

SOURCE

BAF155 (DXD7) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 591-608 in the BAF155 sequence of human origin.

PRODUCT

Each vial contains 200 μ g lgG₁ 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-32763 X, 200 μ g/0.1 ml.

BAF155 (DXD7) is available conjugated to agarose (sc-32763 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-32763 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-32763 PE), fluorescein (sc-32763 FITC), Alexa Fluor* 488 (sc-32763 AF488), Alexa Fluor* 546 (sc-32763 AF546), Alexa Fluor* 594 (sc-32763 AF594) or Alexa Fluor* 647 (sc-32763 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor* 680 (sc-32763 AF680) or Alexa Fluor* 790 (sc-32763 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

BAF155 (DXD7) is recommended for detection of BAF155 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:1000, dilution range 1:500-1:1000), 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for BAF155 siRNA (h): sc-29780, BAF155 siRNA (m): sc-29781, BAF155 shRNA Plasmid (h): sc-29780-SH, BAF155 shRNA Plasmid (m): sc-29781-SH, BAF155 shRNA (h) Lentiviral Particles: sc-29780-V and BAF155 shRNA (m) Lentiviral Particles: sc-29781-V.

BAF155 (DXD7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

STORAGE

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

DATA





BAF155 (DXD7) HRP: sc-32763 HRP. Direct western blot analysis of BAF155 expression in Jurkat (A), NTERA-2 cl.D1 (B) and Hep G2 (C) whole cell lysates and HeLa (D) and Jurkat (E) nuclear extracts.

BAF155 (DXD7): sc-32763. Immunofluorescence staining of methanol-fixed Jurkat cells showing nuclear localization (**A**). Immunofluorescence staining of formalin-fixed HeLa cells showing nuclear localization (**B**)

SELECT PRODUCT CITATIONS

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- Kulkarni, R.A., et al. 2019. A chemoproteomic portrait of the oncometabolite fumarate. Nat. Chem. Biol. 15: 391-400.
- Szewczyk, M.M., et al. 2020. Pharmacological inhibition of PRMT7 links arginine monomethylation to the cellular stress response. Nat. Commun. 11: 2396.
- Saqcena, M., et al. 2021. SWI/SNF complex mutations promote thyroid tumor progression and insensitivity to redifferentiation therapies. Cancer Discov. 11: 1158-1175.
- Guo, P., et al. 2022. The assembly of mammalian SWI/SNF chromatin remodeling complexes is regulated by lysine-methylation dependent proteolysis. Nat. Commun. 13: 6696.
- Yao, X., et al. 2023. PBRM1-deficient PBAF complexes target aberrant genomic loci to activate the NFκB pathway in clear cell renal cell carcinoma. Nat. Cell Biol. 25: 765-777.
- Hyun, K., et al. 2024. The BAF complex enhances transcription through interaction with H3K56ac in the histone globular domain. Nat. Commun. 15: 9614.

RESEARCH USE

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

Molecular Weight of BAF155: 150 kDa.