SANTA CRUZ BIOTECHNOLOGY, INC.

# BAF60a (A-11): sc-514400

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

BAF60a (BRG1-associated factor 60A), also known as SMARCD1 (SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily δ, member 1), Rsc6p or CRACD1, is a 476 amino acid protein that localizes to the nucleus and contains one SWIB domain. Expressed ubiquitously with notable expression in liver, brain, muscle, lung, kidney, pancreas and placenta, BAF60a functions as a component of the BAF complex and, in conjunction with a variety of other proteins, plays an essential role in chromatin remodeling. In addition, BAF60a influences vitamin D-mediated transcriptional activity and is thought to provide a link between the vitamin D receptor (VDR) and SWI/SNF chromatin remodeling complexes. Multiple isoforms of BAF60a exist due to alternative splicing events.

## CHROMOSOMAL LOCATION

Genetic locus: SMARCD1 (human) mapping to 12q13.12; Smarcd1 (mouse) mapping to 15 F1.

## SOURCE

BAF60a (A-11) is a mouse monoclonal antibody raised against amino acids 5-304 mapping near the N-terminus of BAF60a of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_{2a}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BAF60a (A-11) is available conjugated to agarose (sc-514400 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514400 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514400 PE), fluorescein (sc-514400 FITC), Alexa Fluor® 488 (sc-514400 AF488), Alexa Fluor® 546 (sc-514400 AF546), Alexa Fluor® 594 (sc-514400 AF594) or Alexa Fluor® 647 (sc-514400 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514400 AF680) or Alexa Fluor® 790 (sc-514400 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.



## APPLICATIONS

BAF60a (A-11) is recommended for detection of BAF60a of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), 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), 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).

Suitable for use as control antibody for BAF60a siRNA (h): sc-72597, BAF60a siRNA (m): sc-72598, BAF60a shRNA Plasmid (h): sc-72597-SH, BAF60a shRNA Plasmid (m): sc-72598-SH, BAF60a shRNA (h) Lentiviral Particles: sc-72597-V and BAF60a shRNA (m) Lentiviral Particles: sc-72598-V.

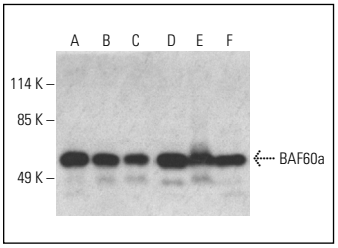
Molecular Weight of BAF60a: 60 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Neuro-2A whole cell lysate: sc-364185 or EOC 20 whole cell lysate: sc-364187.

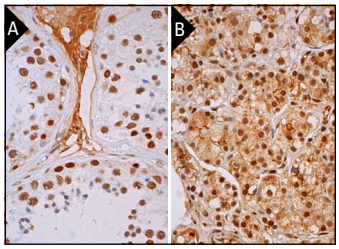
## RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA




BAF60a (A-11) HRP: sc-514400 HRP. Direct western blot analysis of BAF60a expression in Jurkat (**A**), Neuro-2A (**B**), RPE-J (**C**), JM1 (**D**), EOC 20 (**E**) and MOLT-4 (**F**) whole cell lysates.




BAF60a (A-11): sc-514400. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear staining of cells in seminiferous ducts and nuclear and cytoplasmic staining of Leydig cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing nuclear and cytoplasmic staining of glandular cells (**B**).

## SELECT PRODUCT CITATIONS

1. Alpsoy, A. and Dykhuizen, E.C. 2018. Glioma tumor suppressor candidate region gene 1 (GLTSCR1) and its paralog GLTSCR1-like form SWI/SNF chromatin remodeling subcomplexes. J. Biol. Chem. 293: 3892-3903.
2. Huang, X., et al. 2021. OCT4 cooperates with distinct ATP-dependent chromatin remodelers in naïve and primed pluripotent states in human. Nat. Commun. 12: 5123.

## 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.