SANTA CRUZ BIOTECHNOLOGY, INC.

SMARCD2 (F-19): sc-102119



BACKGROUND

SMARCD2 (SWI/SNF related, matrix associated, Actin-dependent regulator of chromatin, subfamily D, member 2), also known as Rsc6p, PR02451, BAF60B (BRG1-associated factor 60B) or CRACD2, is a member of the SMARCD family and contains one SWIB domain. Expressed in liver, muscle, pancreas, lung and placenta, SMARCD2 localizes to the nucleus and is a component of the ATP-dependent chromatin remodeling complex SWI/SNF and is believed to play a role in nucleosome remodeling. The SWI/SNF complex is involved in the activation of transcription via the remodeling of nucleosome structure in an ATP-dependent manner. SMARCD2 is a homolog of the *Saccharomyces cerevisiae* protein Swp73, a component of the yeast Swi/Snf complex that is required for transcriptional activation. Due to alternative splicing events, two isoforms exist for SMARCD2.

REFERENCES

- Wang, W., et al. 1996. Diversity and specialization of mammalian SWI/SNF complexes. Genes Dev. 10: 2117-2130.
- Nomoto, K., et al. 1997. Gene structure of rat BAF60B, a component of mammalian SW1/SNF complexes, and its physical linkage to the growth hormone gene and transcription factor SUG/proteasome p45 gene. Gene 202: 157-165.

CHROMOSOMAL LOCATION

Genetic locus: SMARCD2 (human) mapping to 17q23.3; Smarcd2 (mouse) mapping to 11 E1.

SOURCE

SMARCD2 (F-19) is a purified rabbit polyclonal antibody raised against SMARCD2 of human origin.

PRODUCT

Each vial contains 50 μg IgG in 500 μl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

SMARCD2 (F-19) is recommended for detection of SMARCD2 of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, 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 SMARCD2 siRNA (h): sc-93762, SMARCD2 siRNA (m): sc-153618, SMARCD2 shRNA Plasmid (h): sc-93762-SH, SMARCD2 shRNA Plasmid (m): sc-153618-SH, SMARCD2 shRNA (h) Lentiviral Particles: sc-93762-V and SMARCD2 shRNA (m) Lentiviral Particles: sc-153618-V.

Molecular Weight of SMARCD2: 60 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat whole cell lysate: sc-2204 or mouse thymus extract: sc-2406.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA





 $\begin{array}{l} \mathsf{SMARCD2} \ (\mathsf{F-19}); \ \mathsf{sc-102119}. \ \mathsf{Western} \ \mathsf{blot} \ \mathsf{analysis} \\ \mathsf{of} \ \mathsf{SMARCD2} \ \mathsf{expression} \ in \ \mathsf{HeLa} \ \mathsf{nuclear} \ \mathsf{extract} \ (\mathbf{A}), \\ \mathsf{Jurkat} \ (\mathbf{B}) \ \mathsf{and} \ \mathsf{K-562} \ (\mathbf{C}) \ \mathsf{whole} \ \mathsf{cell} \ \mathsf{lysates} \ \mathsf{and} \ \mathsf{mouse} \\ \mathsf{thymus} \ \mathsf{tissue} \ \mathsf{extract} \ (\mathbf{D}). \end{array}$

SMARCD2 (F-19): sc-102119. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing nuclear staining.

STORAGE

Store at 4° C, **D0 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **SMARCD2 (F-34): sc-101162**, our highly recommended monoclonal aternative to SMARCD2 (F-19).