SANTA CRUZ BIOTECHNOLOGY, INC.

CHRAC17 (m): 293T Lysate: sc-125134

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DNA replication is initiated by the binding of initiation factors to the origin of replication. Nucleosomes inhibit access to the replication machinery at these origin sequences. Nucleosome remodeling factors increase the accessibility of nucleosomal DNA to transcriptional regulators. CHRAC15 and CHRAC17 are subunits of the nucleosomal remodeling factor CHRAC (chromatin accessibility complex), which increases the accessibility of nucleosomal DNA in an ATP-dependent manner. Unlike other known chromatin remodeling factors, CHRAC also functions during chromatin assembly by using ATP to convert irregular chromatin into a regular array of nucleosomes with even spacing. This conversion process occurs when CHRAC organizes randomly deposited histones into a regularly spaced array. In the presence of CHRAC, the nucleosomal ATPase ISWI catalyses several ATP-dependent transitions of chromatin structure.

REFERENCES

1. Varga-Weisz, P.D., Wilm, M., Bonte, E., Dumas, K., Mann, M. and Becker, P.B. 1997. Chromatin-remodeling factor CHRAC contains the ATPases ISWI and topoisomerase II. Nature 388: 598-602.
2. Alexiadis, V., Varga-Weisz, P.D., Bonte, E., Becker, P.B. and Gruss, C. 1998. *In vitro* chromatin remodeling by chromatin accessibility complex (CHRAC) at the SV40 origin of DNA replication. EMBO J. 17: 3428-3438.
3. Langst, G., Bonte, E.J., Corona, D.F. and Becker, P.B. 1999. Nucleosome movement by CHRAC and ISWI without disruption or trans-displacement of the histone octamer. Cell 97: 843-852.
4. Guschin, D., Geiman, T.M., Kikyo, N., Tremethick, D.J., Wolffe, A.P. and Wade, P.A. 2000. Multiple ISWI ATPase complexes from *Xenopus laevis*. Functional conservation of an ACF/CHRAC homolog. J. Biol. Chem. 275: 35248-35245.
5. Clapier, C.R., Langst, G., Corona, D.F., Becker, P.B. and Nightingale, K.P. 2001. Critical role for the histone H4 N-terminus in nucleosome remodeling by ISWI. Mol. Cell. Biol. 21: 875-883.

CHROMOSOMAL LOCATION

Genetic locus: Pole3 (mouse) mapping to 4 B3.

PRODUCT

CHRAC17 (m): 293T Lysate represents a lysate of mouse CHRAC17 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CHRAC17 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CHRAC17 antibodies. Recommended use: 10-20 µl per lane.

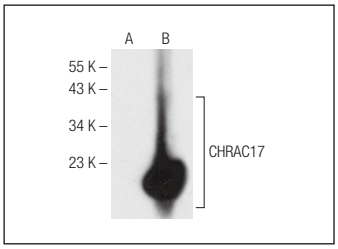
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CHRAC17 (E-11): sc-376242 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse CHRAC17 expression in CHRAC17 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

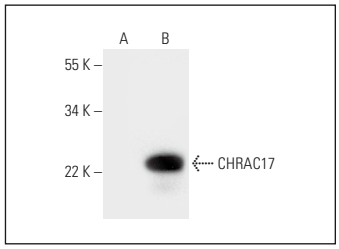
RECOMMENDED SUPPORT REAGENTS

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.

DATA



CHRAC17 (E-11): sc-376242. Western blot analysis of CHRAC17 expression in non-transfected: sc-117752 (**A**) and mouse CHRAC17 transfected: sc-125134 (**B**) 293T whole cell lysates.



CHRAC17 (D-1): sc-393397. Western blot analysis of CHRAC17 expression in non-transfected: sc-117752 (**A**) and mouse CHRAC17 transfected: sc-125134 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.