SANTA CRUZ BIOTECHNOLOGY, INC.

BAZ1A (L-20): sc-10632

The Power to Question

BACKGROUND

Chromatin remodeling complexes are suggested to provide a level of regulatory control and specificity of chromatin remodeling processes. Based upon their associated ATPase, chromatin remodeling complexes are organized into four different families, SWI/SNF, ISWI, CHD and INO80. Several members of the BAZ/WAL family interact independently with hSNF2H, the human homolog of *Drosophilia* ISWI, to form chromatin remodeling factors. BAZ1A (bromodomain adjacent to zinc finger domain, 1A), also known as ACF1, WALp1, hACF1 or WCRF180), is a 1,556 amino acid nuclear protein that is highly expressed in testis and consists of several conserved structures including a bromo domain, a DDT domain, a PHD-type zinc finger and a WAC motif. Belonging to the BAZ/WAL family, BAZ1A is closely related to Williams syndrome transcription factor (WSTF) and may participate in transcriptional regulation and in the formation of heterochromatin, thereby indicating a critical role in developmental control. Together with CHRAC15, CHRAC17 and hSNF2H proteins, BAZ1A forms an ISWI chromatin-remodeling complex.

REFERENCES

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2. Jones, M.H., et al. 2000. A novel family of bromodomain genes. Genomics 63: 40-45.
3. LeRoy, G., et al. 2000. Purification and characterization of a human factor that assembles and remodels chromatin. J. Biol. Chem. 275: 14787-14790.
4. Bochar, D.A., et al. 2000. A family of chromatin remodeling factors related to Williams syndrome transcription factor. Proc. Natl. Acad. Sci. USA 97: 1038-1043.
5. Bozhenok, L., et al. 2002. WSTF-ISWI chromatin remodeling complex targets heterochromatic replication foci. EMBO J. 21: 2231-2241.
6. Fan, H.Y., et al. 2005. Swapping function of two chromatin remodeling complexes. Mol. Cell 17: 805-815.
7. He, X., et al. 2006. Human ACF1 alters the remodeling strategy of SNF2h. J. Biol. Chem. 281: 28636-28647.
8. Ewing, A.K., et al. 2007. Novel regulatory role for human Acf1 in transcriptional repression of vitamin D_3 receptor-regulated genes. Mol. Endocrinol. 21: 1791-1806.

CHROMOSOMAL LOCATION

Genetic locus: Baz1a (mouse) mapping to 12 C1.

SOURCE

BAZ1A (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BAZ1A of mouse origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10632 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-10632 X, 200 µg/0.1 ml.

APPLICATIONS

BAZ1A (L-20) is recommended for detection of BAZ1A of mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BAZ1A siRNA (m): sc-38624, BAZ1A shRNA Plasmid (m): sc-38624-SH and BAZ1A shRNA (m) Lentiviral Particles: sc-38624-V.

BAZ1A (L-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BAZ1A: 190 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.