SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF167 (E-10): sc-393061

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. A member of the Krüppel C_2H_2-type zinc-finger protein family, ZNF167 (zinc finger protein 167), also known as zinc finger protein with KRAB and SCAN domains 7, is a 754 amino acid protein containing 13 C_2H_2-type zinc fingers, one KRAB domain and one SCAN box domain. Localized to the nucleus, ZNF167 exhibits transcriptional regulation activity. There are two isoforms of ZNF167 that are produced as a result of alternative splicing events.

REFERENCES

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2. Constantinou-Deltas, C.D., et al. 1992. The identification and characterization of KRAB-domain-containing zinc finger proteins. Genomics 12: 581-589.
3. Pengue, G., et al. 1994. Repression of transcriptional activity at a distance by the evolutionarily conserved KRAB domain present in a subfamily of zinc finger proteins. Nucleic Acids Res. 22: 2908-2914.
4. Witzgall, R., et al. 1994. The Krüppel-associated box-A (KRAB-A) domain of zinc finger proteins mediates transcriptional repression. Proc. Natl. Acad. Sci. USA 91: 4514-4518.
5. Vissing, H., et al. 1995. Repression of transcriptional activity by heterologous KRAB domains present in zinc finger proteins. FEBS Lett. 369: 153-157.
6. Yano, K., et al. 2000. Identification and characterization of human ZNF274 cDNA, which encodes a novel Krüppel-type zinc-finger protein having nucleolar targeting ability. Genomics 65: 75-80.
7. Edelstein, L.C. and Collins, T. 2005. The SCAN domain family of zinc finger transcription factors. Gene 359: 1-17.
8. Sripathy, S.P., et al. 2006. The KAP1 corepressor functions to coordinate the assembly of *de novo* HP1-demarcated microenvironments of heterochromatin required for KRAB zinc finger protein-mediated transcriptional repression. Mol. Cell. Biol. 26: 8623-8638.

CHROMOSOMAL LOCATION

Genetic locus: ZNF167 (human) mapping to 3p21.31.

SOURCE

ZNF167 (E-10) is a mouse monoclonal antibody raised against amino acids 124-206 mapping within an internal region of ZNF167 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 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-393061 X, 200 µg/0.1 ml.

APPLICATIONS

ZNF167 (E-10) is recommended for detection of ZNF167 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF167 siRNA (h): sc-78544, ZNF167 shRNA Plasmid (h): sc-78544-SH and ZNF167 shRNA (h) Lentiviral Particles: sc-78544-V.

ZNF167 (E-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of ZNF167 isoforms: 85/30 kDa.

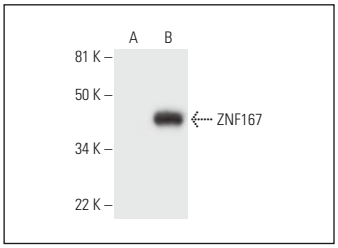
Molecular Weight (observed) of ZNF167 isoforms: 38 kDa.

Positive Controls: ZNF167 (h2): 293T Lysate: sc-116846.

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.

DATA



ZNF167 (E-10): sc-393061. Western blot analysis of ZNF167 expression in non-transfected: sc-117752 (**A**) and human ZNF167 transfected: sc-116846 (**B**) 293T whole cell lysates.

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.