

ZNF167 (N-12): sc-100254

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 C₂H₂-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 C₂H₂-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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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 micro-environments 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 3p21.32.

SOURCE

ZNF167 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of ZNF167 of human 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 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100254 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-100254 X, 200 µg/0.1 ml.

APPLICATIONS

ZNF167 (N-12) is recommended for detection of ZNF167 of human 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); non cross-reactive with other ZNF family members.

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.

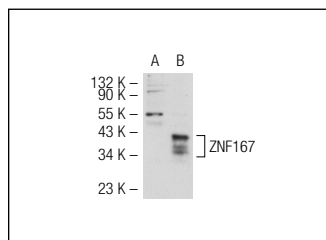
ZNF167 (N-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

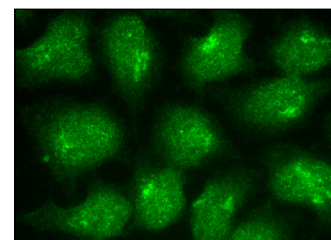
Molecular Weight (observed) of ZNF167: 38 kDa.

Positive Controls: ZNF167 (h): 293 Lysate: sc-112727 or Jurkat whole cell lysate: sc-2204.

DATA



ZNF167 (N-12): sc-100254. Western blot analysis of ZNF167 expression in non-transfected: sc-110760 (A) and human ZNF167 transfected: sc-112727 (B) 293 whole cell lysates.



ZNF167 (N-12): sc-100254. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

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.