SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF415 (E-12): sc-132950

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. As a member of the Krüppel C_2H_2-type zinc-finger protein family, ZNF415 (zinc finger protein 415) is a 603 amino acid protein. Localized to the nucleus, ZNF415 contains twelve C_2H_2-type zinc fingers. ZNF415 is thought to be involved in transcriptional regulation by suppressing the transcriptional activities of Jun and p53. Ubiquitously expressed, ZNF415 exists as five isoforms produced by alternative splicing. The isoforms differ in their expression levels, with isoforms three and five being highly expressed, isoform 4 having moderate expression and isoforms 1 and 2 having the lowest expression.

REFERENCES

1. Payre, F., et al. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. FEBS Lett. 234: 245-250.
2. Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. Proc. Natl. Acad. Sci. USA 85: 99-102.
3. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
4. Rosenfeld, R., et al. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dyn. 11: 557-570.
5. Englbrecht, C.C., et al. 2004. Conservation, diversification and expansion of C_2H_2 zinc finger proteins in the *Arabidopsis thaliana* genome. BMC Genomics 5: 39.
6. Cheng, Y., et al. 2006. A novel human gene ZNF415 with five isoforms inhibits AP-1- and p53-mediated transcriptional activity. Biochem. Biophys. Res. Commun. 351: 33-39.

CHROMOSOMAL LOCATION

Genetic locus: ZNF415 (human) mapping to 19q13.42.

SOURCE

ZNF415 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF415 of human origin.

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-132950 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ZNF415 (E-12) is recommended for detection of ZNF415 isoforms 1, 2, 4 and 5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ZNF415 isoform 3; non cross-reactive with other ZNF family members.

Suitable for use as control antibody for ZNF415 siRNA (h): sc-97175, ZNF415 shRNA Plasmid (h): sc-97175-SH and ZNF415 shRNA (h) Lentiviral Particles: sc-97175-V.

Molecular Weight of ZNF415: 69 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) 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.