## SANTA CRUZ BIOTECHNOLOGY, INC.

# ZCCHC6 (L-13): sc-137946



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. ZCCHC6 (zinc finger, CCHC domain containing 6), also known as TUTase 7 (terminal uridylyltransferase 7), PAPD6 (PAP associated domain containing 6) or HS2, is a 1,495 amino acid uridylyltransferase that mediates RNA uridylation. A member of the DNA polymerase type-B-like family, ZCCHC6 contains three CCHC-type zinc fingers and two PAP-associated domains, and exists as six alternatively spliced isoforms. The gene encoding ZCCHC6 maps to human chromosome 9q21.33 and mouse chromosome 13 B2.

## REFERENCES

- 1. Bray, P., et al. 1991. Characterization and mapping of human genes encoding zinc finger proteins. Proc. Natl. Acad. Sci. USA 88: 9563-9567.
- Lichter, P., et al. 1992. Clustering of C<sub>2</sub>-H<sub>2</sub> zinc-finger motif sequences within telomeric and fragile site regions of human chromosomes. Genomics 13: 999-1007.
- 3. Urrutia, R. 2003. KRAB-containing zinc-finger repressor proteins. Genome Biol. 4: 231.
- 4. Huntley, S., et al. 2006. A comprehensive catalog of human KRAB-associated zinc-finger genes: insights into the evolutionary history of a large family of transcriptional repressors. Genome Res. 16: 669-677.
- 5. Filion, G.J., et al. 2006. A family of human zinc-finger proteins that bind methylated DNA and repress transcription. Mol. Cell. Biol. 26: 169-181.
- Rissland, O.S., et al. 2007. Efficient RNA poly-uridylation by noncanonical poly(A) polymerases. Mol. Cell. Biol. 27: 3612-3624.
- Mullen, T.E., et al. 2008. Degradation of histone mRNA requires oligouridylation followed by decapping and simultaneous degradation of the mRNA both 5' to 3' and 3' to 5'. Genes Dev. 22: 50-65.
- 8. Heo, I., et al. 2009. TUT4 in concert with Lin28 suppresses microRNA biogenesis through pre-microRNA uridylation. Cell 138: 696-708.

## CHROMOSOMAL LOCATION

Genetic locus: ZCCHC6 (human) mapping to 9q21.33; Zcchc6 (mouse) mapping to 13 B2.

## SOURCE

ZCCHC6 (L-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZCCHC6 of human origin.

#### PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137946 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ZCCHC6 (L-13) is recommended for detection of ZCCHC6 isoforms 1-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ZCCHC family members.

ZCCHC6 (L-13) is also recommended for detection of ZCCHC6 isoforms 1-6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZCCHC6 siRNA (h): sc-92875, ZCCHC6 siRNA (m): sc-155482, ZCCHC6 shRNA Plasmid (h): sc-92875-SH, ZCCHC6 shRNA Plasmid (m): sc-155482-SH, ZCCHC6 shRNA (h) Lentiviral Particles: sc-92875-V and ZCCHC6 shRNA (m) Lentiviral Particles: sc-155482-V.

Molecular Weight of ZCCHC6 isoforms: 171/70/62/145/48/167 kDa.

Positive Controls: Human prostate tissue extract.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



ZCCHC6 (L-13): sc-137946. Western blot analysis of ZCCHC6 expression in human prostate tissue extract

## STORAGE

Store at 4° C, \*\*D0 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.