SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF345 (38-H): sc-101081

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. ZNF345 (zinc finger protein 345), also known as HZF10, is a 488 amino acid member of the Krüppel C_2H_2-type zinc-finger protein family. Localized to the nucleus, ZNF345 contains 15 C_2H_2-type zinc fingers and is thought to function as a transcriptional regulator.

REFERENCES

1. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
2. Rousseau-Merck, M.F., Hillion, J., Jonveaux, P., Couillin, P., Seite, P., Thiesen, H.J. and Berger, R. 1993. Chromosomal localization of 9 KOX zinc finger genes: physical linkages suggest clustering of KOX genes on chromosomes 12, 16, and 19. Hum. Genet. 92: 583-587.
3. Abrink, M., Aveskogh, M. and Hellman, L. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc finger proteins expressed in the human monoblast cell line U-937. DNA Cell Biol. 14: 125-136.
4. Williams, A.J., Blacklow, S.C. and Collins, T. 1999. The zinc finger-associated SCAN box is a conserved oligomerization domain. Mol. Cell. Biol. 19: 8526-8535.
5. Rousseau-Merck, M.F., Koczan, D., Legrand, I., Möller, S., Autran, S. and Thiesen, H.J. 2002. The KOX zinc finger genes: genome wide mapping of 3.ZNF PAC clones with zinc finger gene clusters predominantly in 23 chromosomal loci are confirmed by human sequences annotated in EnsEMBL. Cytogenet. Genome Res. 98: 147-153.
6. Englbrecht, C.C., Schoof, H. and Böhm, S. 2004. Conservation, diversification and expansion of C_2H_2 zinc finger proteins in the *Arabidopsis thaliana* genome. BMC Genomics 5: 39.

CHROMOSOMAL LOCATION

Genetic locus: ZNF345 (human) mapping to 19q13.12.

SOURCE

ZNF345 (38-H) is a mouse monoclonal antibody raised against recombinant ZNF345 of human origin.

PRODUCT

Each vial contains 50 µg IgG_{2b} kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

ZNF345 (38-H) is recommended for detection of ZNF345 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), immunohistochemistry (including paraffin-embedded sections) (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 ZNF345 siRNA (h): sc-97150, ZNF345 shRNA Plasmid (h): sc-97150-SH and ZNF345 shRNA (h) Lentiviral Particles: sc-97150-V.

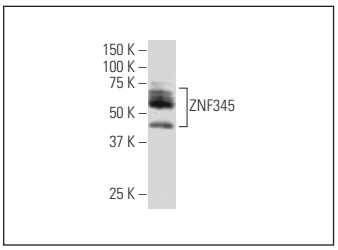
Molecular Weight of ZNF345: 55 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

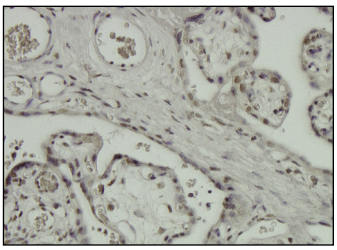
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



ZNF345 (38-H): sc-101081. Western blot analysis of ZNF345 expression in HeLa whole cell lysate.



ZNF345 (38-H): sc-101081. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human placenta tissue showing nuclear and cytoplasmic localization.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.