ZNF343 (N-14): sc-98231



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. As a member of the Krüeppel $\rm C_2H_2$ -type zinc-finger protein family, ZNF343 (zinc finger protein 343) is a 599 amino acid nuclear protein that contains one KRAB domain and 12 $\rm C_2H_2$ -type zinc fingers. The gene encoding ZNF343 maps to human chromosome 20, which contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome. There are three isoforms of ZNF343 that are expressed as a result of alternative splicing events.

REFERENCES

- 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. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- 3. 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.
- Deloukas, P., et. al. J. 2001. The DNA sequence and comparative analysis of human chromosome 20. Nature 414: 865-871.
- Edelstein, L.C., et al. 2005. The SCAN domain family of zinc finger transcription factors. Gene 359: 1-17.
- Ville, D., et al. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. Epilepsia 47: 543-549.
- 7. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. Asian J. Androl. 9: 540-544.
- 8. Fan, B.J., et al. 2008. Gene expression profiles of human trabecular meshwork cells induced by triamcinolone and dexamethasone. Invest. Ophthalmol. Vis. Sci. 49: 1886-1897.
- Liu, J., et al. 2008. Context-dependent DNA recognition code for C₂H₂ zincfinger transcription factors. Bioinformatics 24: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZNF343 (human) mapping to 20p13.

SOURCE

ZNF343 (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of ZNF343 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-98231 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF343 (N-14) is recommended for detection of ZNF343 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 isoform 2.

Suitable for use as control antibody for ZNF343 siRNA (h): sc-76982, ZNF343 shRNA Plasmid (h): sc-76982-SH and ZNF343 shRNA (h) Lentiviral Particles: sc-76982-V.

Molecular Weight of ZNF343: 69 kDa.

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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™ 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.

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