

ZASC1 (H-2): sc-514241



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. ZASC1, also known as ZNF639 (zinc finger protein 639) or ANC-2H01, is a 485 amino acid protein that localizes to the nucleus and contains 5 C₂H₂-type zinc fingers. One of several members of the Krüppel C₂H₂-type zinc-finger family, ZASC1 is thought to be involved in transcriptional regulation. The gene encoding ZASC1 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan Syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

- Muller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
- Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
- Imoto, I., et al. 2003. Identification of ZASC1 encoding a Krüppel-like zinc finger protein as a novel target for 3q26 amplification in esophageal squamous cell carcinomas. *Cancer Res.* 63: 5691-5696.
- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
- Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test". *Genomics* 86: 1-12.

CHROMOSOMAL LOCATION

Genetic locus: ZNF639 (human) mapping to 3q26.33; Zfp639 (mouse) mapping to 3 A3.

SOURCE

ZASC1 (H-2) is a mouse monoclonal antibody raised against amino acids 60-298 mapping within an internal region of ZASC1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZASC1 (H-2) is available conjugated to agarose (sc-514241 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514241 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514241 PE), fluorescein (sc-514241 FITC), Alexa Fluor® 488 (sc-514241 AF488), Alexa Fluor® 546 (sc-514241 AF546), Alexa Fluor® 594 (sc-514241 AF594) or Alexa Fluor® 647 (sc-514241 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514241 AF680) or Alexa Fluor® 790 (sc-514241 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ZASC1 (H-2) is recommended for detection of ZASC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ZASC1 siRNA (h): sc-78157, ZASC1 siRNA (m): sc-155431, ZASC1 shRNA Plasmid (h): sc-78157-SH, ZASC1 shRNA Plasmid (m): sc-155431-SH, ZASC1 shRNA (h) Lentiviral Particles: sc-78157-V and ZASC1 shRNA (m) Lentiviral Particles: sc-155431-V.

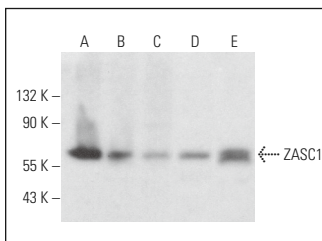
Molecular Weight of ZASC1: 56 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HL-60 whole cell lysate: sc-2209 or HEK293 whole cell lysate: sc-45136.

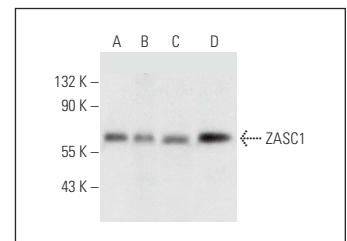
RECOMMENDED SUPPORT REAGENTS

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.

DATA



ZASC1 (H-2): sc-514241. Western blot analysis of ZASC1 expression in HEL 92.1.7 (A), NIH/3T3 (B) and KNRK (C) nuclear extracts and SP2/O (D) and SUP-T1 (E) whole cell lysates.



ZASC1 (H-2): sc-514241. Western blot analysis of ZASC1 expression in HeLa (A) and HL-60 (B) nuclear extracts and HL-60 (C) and HEK293 (D) whole cell lysates.

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.

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