ZKSCAN2 (F-8): sc-514383



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. A member of the Krüppel C_2H_2 -type zinc-finger protein family, ZKSCAN2, also known as ZNF694, is a 967 amino acid nuclear protein containing 6 C_2H_2 -type zinc fingers, one KRAB A domain and one SCAN box domain. Like many other KRAB A box-containing proteins, ZKSCAN2 is suggested to function as a transcriptional repressor. As a result of alternative splicing, two transcripts of ZKSCAN2 exist. The gene encoding ZKSCAN2 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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- 2. Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. Am. J. Hum. Genet. 52: 249-254.
- 3. Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat. Genet. 36: 40-45.
- 4. Martin, J., et al. 2004. The sequence and analysis of duplication-rich human chromosome 16. Nature 432: 988-994.
- 5. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Genome Res. 14: 2121-2127.
- Bechtel, S., et al. 2007. The full-ORF clone resource of the German cDNA Consortium. BMC Genomics 8: 399.
- 7. Dephoure, N., et al. 2008. A quantitative atlas of mitotic phosphorylation. Proc. Natl. Acad. Sci. USA 105: 10762-10767.

CHROMOSOMAL LOCATION

Genetic locus: ZKSCAN2 (human) mapping to 16p12.1.

SOURCE

ZKSCAN2 (F-8) is a mouse monoclonal antibody raised against amino acids 132-216 mapping within an internal region of ZKSCAN2 of human origin.

PRODUCT

Each vial contains 200 μg lgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZKSCAN2 (F-8) is available conjugated to agarose (sc-514383 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514383 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514383 PE), fluorescein (sc-514383 FITC), Alexa Fluor® 488 (sc-514383 AF488), Alexa Fluor® 546 (sc-514383 AF546), Alexa Fluor® 594 (sc-514383 AF594) or Alexa Fluor® 647 (sc-514383 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514383 AF680) or Alexa Fluor® 790 (sc-514383 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ZKSCAN2 (F-8) is recommended for detection of ZKSCAN2 of 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 ZKSCAN2 siRNA (h): sc-93274, ZKSCAN2 shRNA Plasmid (h): sc-93274-SH and ZKSCAN2 shRNA (h) Lentiviral Particles: sc-93274-V.

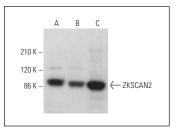
Molecular Weight of ZKSCAN2 isoforms 1/2: 111/58 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, MES-SA/Dx5 cell lysate: sc-2284 or HeLa whole cell lysate: sc-2200.

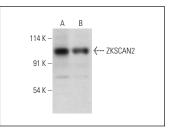
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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-lgG κ BP-FITC: sc-516140 or m-lgG κ 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







ZKSCAN2 (F-8): sc-514383. Western blot analysis of ZKSCAN2 expression in HeLa (A) and MES-SA/Dx5 (B) 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.

PROTOCOLS

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

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