ZFP37 (15): sc-293086



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 Krüppel C_2H_2 -type zinc-finger family, ZFP37 (zinc finger protein 37), is a 630 amino acid nuclear protein contains 12 C_2H_2 -type zinc fingers and one KRAB domain, and is thought to be involved in transcriptional regulation. Two isoforms of ZFP37 exist due to alternative splicing events. High expression of ZFP37 is found in adult testis while lower levels are present in mid-gestation embryo and placenta. ZFP37 expression in germ cells is most abundant during spermiogenesis, suggesting a role in regulating spermiogenesis.

REFERENCES

- Burke, P.S. and Wolgemuth, D.J. 1992. Zfp-37, a new murine zinc finger encoding gene, is expressed in a developmentally regulated pattern in the male germ line. Nucleic Acids Res. 20: 2827-2834.
- 2. Mack, H.G., et al. 1997. A search for a mammalian homologue of the *Drosophila* photoreceptor development gene glass yields Zfp64, a zinc finger encoding gene which maps to the distal end of mouse chromosome 2. Gene 185: 11-17.
- 3. Grishin, A.V., et al. 1998. Mot3, a Zn finger transcription factor that modulates gene expression and attenuates mating pheromone signaling in *Saccharomyces cerevisiae*. Genetics 149: 879-892.
- 4. Dreyer, S.D., et al. 1998. Cloning, characterization, and chromosomal assignment of the human ortholog of murine Zfp-37, a candidate gene for Nager syndrome. Mamm. Genome 9: 458-462.

CHROMOSOMAL LOCATION

Genetic locus: ZFP37 (human) mapping to 9q32; Zfp37 (mouse) mapping to 4 B3.

SOURCE

ZFP37 (15) is a mouse monoclonal antibody raised against amino acids 5-112 of ZFP37 of mouse origin.

PRODUCT

Each vial contains 200 $\mu g \ lg G_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZFP37 (15) is available conjugated to agarose (sc-293086 AC), $500 \mu g/0.25 \text{ ml}$ agarose in 1 ml, for IP; to HRP (sc-293086 HRP), $200 \mu g/ml$, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-293086 PE), fluorescein (sc-293086 FITC), Alexa Fluor* 488 (sc-293086 AF488), Alexa Fluor* 594 (sc-293086 AF594) or Alexa Fluor* 647 (sc-293086 AF647), $200 \mu g/ml$, for IF, IHC(P) and FCM; and to either Alexa Fluor* 680 (sc-293086 AF680) or Alexa Fluor* 790 (sc-293086 AF790), $200 \mu g/ml$, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ZFP37 (15) is recommended for detection of ZFP37 of mouse, rat, human and canine 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for ZFP37 siRNA (h): sc-92625, ZFP37 siRNA (m): sc-155552, ZFP37 shRNA Plasmid (h): sc-92625-SH, ZFP37 shRNA Plasmid (m): sc-155552-SH, ZFP37 shRNA (h) Lentiviral Particles: sc-92625-V and ZFP37 shRNA (m) Lentiviral Particles: sc-155552-V.

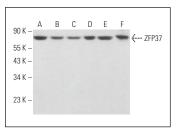
Molecular Weight of ZFP37 isoform 1/2: 71/73 kDa.

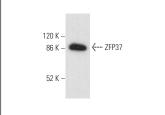
Positive Controls: mouse brain extract: sc-2253, IMR-32 cell lysate: sc-2409 or SJRH30 cell lysate: sc-2287.

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





ZFP37 (15): sc-293086. Western blot analysis of ZFP37 expression in SJRH30 (A), EOC 20 (B), Sol8 (C), IMR-32 (D) and U-251-MG (E) whole cell lysates and mouse brain tissue extract (F).

ZFP37 (15): sc-293086. Western blot analysis of ZFP37 expression in Neuro-2A whole cell lysate.

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.