

ZMYM5 (W-22): sc-134177

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. ZMYM5 (zinc finger, MYM-type 5), also known as ZNF237, HSPC050 or ZNF198L1, is a 669 amino acid nuclear protein that contains 4 MYM-type zinc fingers. ZMYM5 is thought to be a transcriptional regulator that interacts with ERM (also known as ETV5 or ETS translocation variant 5) and represses transcript of PS1 (human presenilin 1). Single nucleotide mutations at positions 112 and 114 abolish the ability of ZMYM5 to interact with ERM, though only the mutation at 112 abolishes the repression of PS1 expression, and a mutation at position 120 has been associated up increased PS1 repression activity. There are five isoforms of ZMYM5 that are produced as a result of alternative splicing events. The gene encoding ZMYM5 maps to chromosome 13q12.11.

REFERENCES

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2. Dunham, A., et al. 2004. The DNA sequence and analysis of human chromosome 13. *Nature* 428: 522-528.
3. Hecker, C.M., et al. 2006. Specification of SUMO1- and SUMO2-interacting motifs. *J. Biol. Chem.* 281: 16117-16127.
4. Pastorcic, M. and Das, H.K. 2007. Analysis of transcriptional modulation of the presenilin 1 gene promoter by ZNF237, a candidate binding partner of the Ets transcription factor ERM. *Brain Res.* 1128: 21-32.
5. Bugge, M., et al. 2007. Non-disjunction of chromosome 13. *Hum. Mol. Genet.* 16: 2004-2010.
6. Lee, S. and Das, H.K. 2010. Transcriptional regulation of the presenilin-1 gene controls gamma-secretase activity. *Front. Biosci.* 2: 22-35.
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CHROMOSOMAL LOCATION

Genetic locus: ZMYM5 (human) mapping to 13q12.11.

SOURCE

ZMYM5 (W-22) is a Protein A purified rabbit polyclonal antibody raised against synthetic ZMYM5 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ZMYM5 (W-22) is recommended for detection of ZMYM5 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZMYM5 siRNA (h): sc-76973, ZMYM5 shRNA Plasmid (h): sc-76973-SH and ZMYM5 shRNA (h) Lentiviral Particles: sc-76973-V.

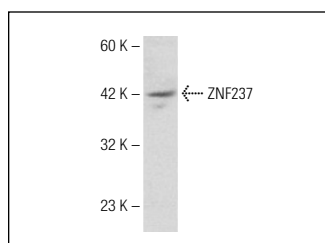
Molecular Weight of ZMYM5 isoforms: 75/56/42/23 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ZMYM5 (W-22): sc-134177. Western blot analysis of ZMYM5 expression in Hep G2 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.