

THUMP3 (N-13): sc-103264

BACKGROUND

The THUMP (after thiouridine synthases, RNA methylases and pseudouridine synthases) domain is an ancient 100-110 amino acid motif that is found in proteins that are involved in RNA-modification pathways. THUMP domains contain RNA-binding sequences and are thought to deliver RNA modification enzymes to their target substrates. THUMP1, THUMP2 and THUMP3 (THUMP domain-containing protein 1, 2 and 3, respectively) are members of the methyltransferase superfamily and each contain one THUMP domain. Both THUMP2 and THUMP3 are expressed in tissues throughout the body with highest expression levels in skeletal muscle, spleen, thymus, liver and kidney. Due to the presence of a THUMP domain, the THUMP proteins are thought to participate in RNA processing events throughout the cell.

REFERENCES

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- Lehner, B. and Sanderson, C.M. 2004. A protein interaction framework for human mRNA degradation. *Genome Res.* 14: 1315-1323.
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- Gross, J.B., Hanken, J., Oglesby, E. and Marsh-Armstrong, N. 2006. Use of a ROSA26:GFP transgenic line for long-term *Xenopus* fate-mapping studies. *J. Anat.* 209: 401-413.

CHROMOSOMAL LOCATION

Genetic locus: THUMP3 (human) mapping to 3p25.3; Thump3 (mouse) mapping to 6 E3.

SOURCE

THUMP3 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of THUMP3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103264 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

THUMP3 (N-13) is recommended for detection of THUMP3 of mouse, rat and 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)], 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 THUMP1 or THUMP2 .

THUMP3 (N-13) is also recommended for detection of THUMP3 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for THUMP3 siRNA (h): sc-78419, THUMP3 siRNA (m): sc-154265, THUMP3 shRNA Plasmid (h): sc-78419-SH, THUMP3 shRNA Plasmid (m): sc-154265-SH, THUMP3 shRNA (h) Lentiviral Particles: sc-78419-V and THUMP3 shRNA (m) Lentiviral Particles: sc-154265-V.

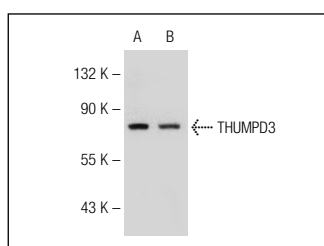
Molecular Weight of THUMP3: 57 kDa.

Positive Controls: mouse testis extract: sc-2405 or mouse lymph node tissue extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



THUMP3 (N-13): sc-103264. Western blot analysis of THUMP3 expression in mouse testis (A) and mouse lymph node (B) tissue extracts.

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.