

THUMP2 (D-11): sc-393018

BACKGROUND

THUMP2 (THUMP domain-containing protein 2) is a 503 amino acid protein that contains one THUMP domain and belongs to the methyltransferase superfamily. THUMP2 is expressed in a variety of tissues including brain, colon, gingiva, heart, kidney, liver, lung, placenta, small intestine, spleen and thymus. The THUMP2 gene encodes two alternatively spliced isoforms and maps to human chromosome 2p22.1. Consisting of about 237 million bases and encoding over 1,400 genes, chromosome 2 makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is due to mutations in the ALMS1 gene.

REFERENCES

1. Baldini, A., et al. 1993. An alphoid DNA sequence conserved in all human and great ape chromosomes: evidence for ancient centromeric sequences at human chromosomal regions 2q21 and 9q13. *Hum. Genet.* 90: 577-583.
2. Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. *J. Clin. Invest.* 102: 1041-1044.
3. Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. *J. Med. Genet.* 37: E8.

CHROMOSOMAL LOCATION

Genetic locus: THUMP2 (human) mapping to 2p22.1; Thump2 (mouse) mapping to 17 E3.

SOURCE

THUMP2 (D-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 417-450 near the C-terminus of THUMP2 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-393018 X, 200 µg/0.1 ml.

THUMP2 (D-11) is available conjugated to agarose (sc-393018 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393018 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393018 PE), fluorescein (sc-393018 FITC), Alexa Fluor® 488 (sc-393018 AF488), Alexa Fluor® 546 (sc-393018 AF546), Alexa Fluor® 594 (sc-393018 AF594) or Alexa Fluor® 647 (sc-393018 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393018 AF680) or Alexa Fluor® 790 (sc-393018 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393018 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

THUMP2 (D-11) is recommended for detection of THUMP2 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).

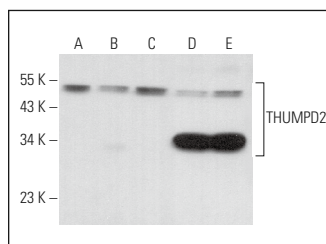
Suitable for use as control antibody for THUMP2 siRNA (h): sc-94515, THUMP2 siRNA (m): sc-154264, THUMP2 shRNA Plasmid (h): sc-94515-SH, THUMP2 shRNA Plasmid (m): sc-154264-SH, THUMP2 shRNA (h) Lentiviral Particles: sc-94515-V and THUMP2 shRNA (m) Lentiviral Particles: sc-154264-V.

THUMP2 (D-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

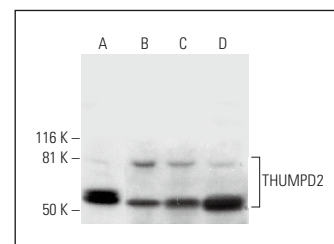
Molecular Weight of THUMP2 isoforms: 56/34 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, A-431 whole cell lysate: sc-2201 or RT-4 whole cell lysate: sc-364257.

DATA



THUMP2 (D-11): sc-393018. Western blot analysis of THUMP2 expression in Jurkat (A), T24 (B), Ca Ski (C), C2C12 (D) and TK-1 (E) whole cell lysates.



THUMP2 (D-11): sc-393018. Western blot analysis of THUMP2 expression in MOLT-4 (A), A-431 (B), RT-4 (C) and U-251-MG (D) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Hua, M., et al. 2024. RNA-binding protein THUMP2 inhibits proliferation and promotes metastasis in epithelial ovarian cancer. *Heliyon* 10: e33201.

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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