

THNSL2 (D-8): sc-390627

BACKGROUND

Threonine is one of nine essential amino acids that cannot be synthesized by humans and must be supplied in the diet. THNSL2 (threonine synthase-like 2), also known as TSH2, is a 484 amino acid protein belonging to the threonine synthase family. Utilizing pyridoxal phosphate as a cofactor, THNSL2 may function as a catabolic phospholyase on γ and β phosphorylated substrates. THNSL2 may also degrade O-phospho-threonine to α -ketobutyrate, ammonia and phosphate. Existing as four alternatively spliced isoforms, THNSL2 is encoded by a gene mapping to human chromosome 2p11.2. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8 gene defects. An extremely rare recessive genetic disorder, Alström syndrome, is related to mutations in the ALMS1 gene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: THNSL2 (human) mapping to 2p11.2; Thnsl2 (mouse) mapping to 6 C1.

SOURCE

THNSL2 (D-8) is a mouse monoclonal antibody raised against amino acids 259-348 mapping within an internal region of THNSL2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

THNSL2 (D-8) is recommended for detection of THNSL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 THNSL2 siRNA (h): sc-94994, THNSL2 siRNA (m): sc-154256, THNSL2 shRNA Plasmid (h): sc-94994-SH, THNSL2 shRNA Plasmid (m): sc-154256-SH, THNSL2 shRNA (h) Lentiviral Particles: sc-94994-V and THNSL2 shRNA (m) Lentiviral Particles: sc-154256-V.

Molecular Weight of THNSL2 isoforms 1/2/3/4: 54/45/43/47 kDa.

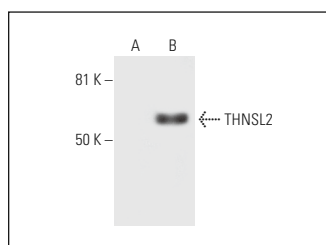
Positive Controls: THNSL2 (m): 293T Lysate: sc-124038.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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-IgG κ BP-FITC: sc-516140 or m-IgG 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



THNSL2 (D-8): sc-390627. Western blot analysis of THNSL2 expression in non-transfected: sc-117752 (A) and mouse THNSL2 transfected: sc-124038 (B) 293T 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.