

Dim1 (C-16): sc-84803

BACKGROUND

The Dim protein family consists of two classes, Dim1 and Dim2, which share a common thioredoxin-like fold, but most likely function in different biological pathways. Dim1, also known as TXNL4A (thioredoxin-like protein 4A) or spliceosomal U5 snRNP-specific 15 kDa protein, is a 142 amino acid protein that plays an essential role in pre-mRNA splicing. Due to a failure to express early zygotic transcripts, deletion of the gene encoding Dim1 in *Schizosaccharomyces pombe* leads to embryonal lethality during gastrulation. Since Dim1 shows sensitivity to a microtubule destabilizing drug, thiabendazole, it also may play a role in the formation of the mitotic spindle. This evidence demonstrates that Dim1 is essential for G₂/M progression of the cell cycle and chromosomal segregation during mitosis. Localized to the nucleus, Dim1 interacts with hnRNP F, hnRNP H2, Cas-L and PQBP-1 to effect gene expression.

CHROMOSOMAL LOCATION

Genetic locus: TXNL4A (human) mapping to 18q23; Txnl4a (mouse) mapping to 18 E3.

SOURCE

Dim1 (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Dim1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-84803 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

Dim1 (C-16) is recommended for detection of Dim1 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).

Dim1 (C-16) is also recommended for detection of Dim1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Dim1 siRNA (h): sc-77145, Dim1 siRNA (m): sc-143039, Dim1 shRNA Plasmid (h): sc-77145-SH, Dim1 shRNA Plasmid (m): sc-143039-SH, Dim1 shRNA (h) Lentiviral Particles: sc-77145-V and Dim1 shRNA (m) Lentiviral Particles: sc-143039-V.

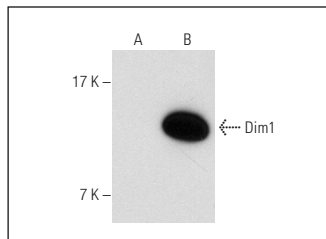
Molecular Weight of Dim1: 15 kDa.

Positive Controls: Dim1 (m2): 293T Lysate: sc-119772 or rat brain extract: sc-2392.

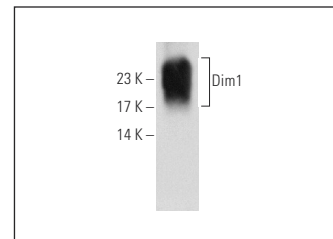
RECOMMENDED SECONDARY REAGENTS

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Dim1 (C-16): sc-84803. Western blot analysis of Dim1 expression in non-transfected: sc-117752 (A) and mouse Dim1 transfected: sc-119772 (B) 293T whole cell lysates.



Dim1 (C-16): sc-84803. Western blot analysis of Dim1 expression in rat brain tissue extract.

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.



Try **Dim1 (B-11): sc-514093** or **Dim1 (B-9): sc-390839**, our highly recommended monoclonal alternatives to Dim1 (C-16).