

# LETM1 (S-15): sc-163013



The Power to Question

## BACKGROUND

LETM1 (leucine zipper-EF-hand-containing transmembrane protein 1, mitochondrial) is a 739 amino acid protein that localizes to the mitochondrial membrane and contains one LETM1 domain and 2 EF-hand calcium-binding domains. Expressed in all fetal and adult tissues, LETM1 has a leucine zipper motif, a transmembrane domain and several phosphorylation sites and, via its EF-hand domains, may function as a calcium-binding protein. Additionally, LETM1 is thought to be involved in maintaining normal mitochondrial function and overall cell viability. Human LETM1 shares 84% similarity with its mouse counterpart, suggesting a conserved role between species. Deletions in the gene encoding LETM1 are associated with Wolf-Hirschhorn syndrome (WHS), a congenital syndrome characterized by a number of abnormalities, including mental retardation, seizures, heart defects, fused teeth, hearing loss, a web-bed neck and renal abnormalities.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: LETM1 (human) mapping to 4p16.3; Letm1 (mouse) mapping to 5 B2.

## SOURCE

LETM1 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LETM1 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-163013 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LETM1 (S-15) is recommended for detection of LETM1 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 LETM2.

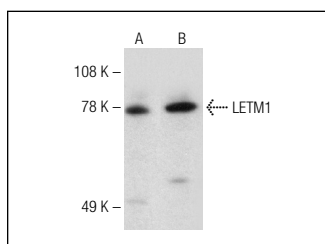
LETM1 (S-15) is also recommended for detection of LETM1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for LETM1 siRNA (h): sc-89079, LETM1 siRNA (m): sc-146712, LETM1 shRNA Plasmid (h): sc-89079-SH, LETM1 shRNA Plasmid (m): sc-146712-SH, LETM1 shRNA (h) Lentiviral Particles: sc-89079-V and LETM1 shRNA (m) Lentiviral Particles: sc-146712-V.

Molecular Weight of LETM1: 85 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or Jurkat whole cell lysate: sc-2204.

## DATA



LETM1 (S-15): sc-163013. Western blot analysis of LETM1 expression in HeLa (A) and Jurkat (B) 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **LETM1 (D-5): sc-271235** or **LETM1 (D-11): sc-514136**, our highly recommended monoclonal alternatives to LETM1 (S-15).