

# Cypher (H-83): sc-98653

## BACKGROUND

Cypher, also known as LDB3 (LIM domain binding 3), ZASP (Z-band alternatively spliced PDZ-motif protein), ORACLE, PDLIM6 (PDZ and LIM domain 6), ldb3z1 or ldb3z4, is a 727 amino acid protein that localizes to the perinuclear region of the cytoplasm and contains three LIM zinc-binding domains. Expressed primarily in skeletal muscle and at lower levels in brain, placenta and heart, Cypher is thought to function as an adaptor protein that, via its LIM domains, couples PKC-mediated signaling in striated muscle to the cytoskeleton. Defects in the gene encoding Cypher are associated with dilated cardiomyopathy 1C (CMD1C), dilated cardiomyopathy with left ventricular non-compaction and ZASP-related myofibrillar myopathy (MFM), all three of which are characterized by defects in cardiac muscle form and/or function. Six isoforms of Cypher exist due to alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: LDB3 (human) mapping to 10q23.2; Ldb3 (mouse) mapping to 14 B.

## SOURCE

Cypher (H-83) is a rabbit polyclonal antibody raised against amino acids 572-654 mapping within an internal region of Cypher of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

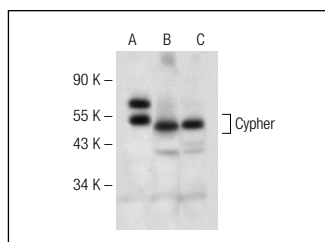
Cypher (H-83) is recommended for detection of Cypher of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Cypher (H-83) is also recommended for detection of Cypher in additional species, including canine and porcine.

Suitable for use as control antibody for Cypher siRNA (h): sc-77078, Cypher siRNA (m): sc-77079, Cypher shRNA Plasmid (h): sc-77078-SH, Cypher shRNA Plasmid (m): sc-77079-SH, Cypher shRNA (h) Lentiviral Particles: sc-77078-V and Cypher shRNA (m) Lentiviral Particles: sc-77079-V.

Molecular Weight of Cypher prominent isoforms: 32/78 kDa.

## DATA



Cypher (H-83): sc-98653. Western blot analysis of Cypher expression in L6 (A), IMR-32 (B) and Sol8 (C) 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Cypher (E-8): sc-374359** or **Cypher (22): sc-136380**, our highly recommended monoclonal alternatives to Cypher (H-83).