

CLS1 (E-14): sc-85488

BACKGROUND

Cardiolipin synthetase, CLS1, is a mitochondrial protein that belongs to the CDP-alcohol phosphatidyltransferase class-I family. CLS1 is a multi-pass membrane protein localized to the inner membrane of mitochondria. CLS1 is responsible for the catalyzing the reversible transfer of a phosphatidyl group from one phosphatidyl glycerol molecule to another. This process results in the formation of cardiolipin (CL, or diphosphatidyl glycerol) and glycerol. Diphosphatidyl glycerol is a major component of the mitochondrial membrane and constitutes roughly 20% of total mitochondrial lipids. Having four fatty acid tails rather than the usual two, CL is a double phospholipid that is synthesized in the mitochondrion itself. Defects in the CRLS1 gene are likely to effect metabolism, sustained production of ATP and could contribute to diseases such as Barth syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CRLS1 (human) mapping to 20p12.3.

SOURCE

CLS1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CLS1 of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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-85488 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLS1 (E-14) is recommended for detection of CLS1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 CLS1 siRNA (h): sc-72929, CLS1 shRNA Plasmid (h): sc-72929-SH and CLS1 shRNA (h) Lentiviral Particles: sc-72929-V.

Molecular Weight of CLS1: 33 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **CLS1 (E-8): sc-514986**, our highly recommended monoclonal alternative to CLS1 (E-14).