

CTP (E-17): sc-86391

BACKGROUND

CTP (citrate transport protein), also known as tricarboxylate transport protein, SLC25A1 or SLC20A3, is a 311 amino acid mitochondrial multi-pass membrane protein that primarily functions to transport citrate across the mitochondrial inner membrane. Since it provides a carbon source for sterol and fatty acid biosynthesis, CTP is important for the bioenergetics of hepatic cells. The gene encoding CTP resides within a chromosomal region that is frequently deleted in patients that suffer from DiGeorge syndrome, a disease characterized by susceptibility to infection due to a deficit of T cells, cardiac malformations and tetany or seizures. Playing a significant role in intermediate metabolism, it appears that CTP function may be altered in type I diabetes and some cancers. CTP is highly expressed in adult ovary, gut liver, and testis, as well as in fetal kidney, lung, brain and liver.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC25A1 (human) mapping to 22q11.21; Slc25a1 (mouse) mapping to 16 A3.

SOURCE

CTP (E-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CTP 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, ready P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CTP (E-17) is recommended for detection of CTP 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).

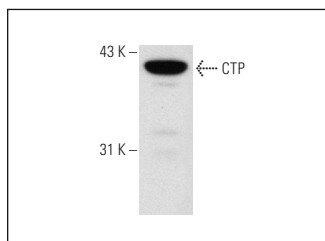
CTP (E-17) is also recommended for detection of CTP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CTP siRNA (h): sc-77046, CTP siRNA (m): sc-142623, CTP shRNA Plasmid (h): sc-77046-SH, CTP shRNA Plasmid (m): sc-142623-SH, CTP shRNA (h) Lentiviral Particles: sc-77046-V and CTP shRNA (m) Lentiviral Particles: sc-142623-V.

Molecular Weight of CTP isoforms: 30-38 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

DATA



CTP (E-17): sc-86391. Western blot analysis of CTP expression in Hep G2 whole cell lysate.

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 or our catalog for detailed protocols and support products.