

# CCT B (N-16): sc-161448

## BACKGROUND

CTP:phosphocholine cytidyltransferase (CCT) is a key enzyme that regulates the biosynthesis of phosphatidylcholine, a major component of biological membranes. CCT B (choline-phosphate cytidyltransferase B), also known as Phosphorylcholine transferase B, is a 369 amino acid cytoplasmic protein that, along with CCT A, controls phosphatidylcholine synthesis in mammals. Highly expressed in placenta, brain, testis and ovary, CCT B is extensively phosphorylated during its post-translational modification. Knockdown of CCT B mRNA results in gonadal dysfunction in mice. CCT B utilizes CTP and choline phosphate to make diphosphate and CDP-choline, a reaction that is dependent upon the presence of stimulatory lipids. There are three isoforms of CCT B that are produced as a result of alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PCYT1B (human) mapping to Xp22.11; Pcyt1b (mouse) mapping to X C3.

## SOURCE

CCT B (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CCT B 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.

Blocking peptide available for competition studies, sc-161448 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CCT B (N-16) is recommended for detection of CCT B of mouse, rat and 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); non cross-reactive with CCT A.

CCT B (N-16) is also recommended for detection of CCT B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CCT B siRNA (h): sc-91132, CCT B siRNA (m): sc-142176, CCT B shRNA Plasmid (h): sc-91132-SH, CCT B shRNA Plasmid (m): sc-142176-SH, CCT B shRNA (h) Lentiviral Particles: sc-91132-V and CCT B shRNA (m) Lentiviral Particles: sc-142176-V.

Molecular Weight of CCT B isoforms: 35/42 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218 or PC-3 cell lysate: sc-2220.

## 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.

## 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.