

ChoKB (D-17): sc-86382

BACKGROUND

The major pathway for the biosynthesis of phosphatidylcholine occurs via the CDP-choline pathway. Choline kinase, the initial enzyme in the sequence, plays a role in cell growth proliferation. A related protein, ChoKB (also, known as choline kinase β), is a 395 amino acid enzyme that catalyzes the phosphorylation of choline by ATP in the presence of magnesium, thereby yielding phosphocholine and ADP. Like all choline kinases, ChoKB possesses ethanalamine kinase activity and catalyzes the phosphorylation of ethanalamine. The gene encoding ChoKB is located less than 1 kb upstream of the CPT1B gene, suggesting that the ChoKB gene may regulate transcription CPT1B. In mice, mutations and/or deletions in the gene encoding ChoKB are the cause of hindlimb muscular dystrophy and neonatal bone deformity.

REFERENCES

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- Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612395. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- SWISS-PROT/TrEMBL (Q9Y259). World Wide Web URL: <http://www.expasy.org/uniprot/Q9Y259>

CHROMOSOMAL LOCATION

Genetic locus: CHKB (human) mapping to 22q13.33.

SOURCE

ChoKB (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ChoKB of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-86382 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ChoKB (D-17) is recommended for detection of ChoKB 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).

ChoKB (D-17) is also recommended for detection of ChoKB in additional species, including equine and porcine.

Suitable for use as control antibody for ChoKB siRNA (h): sc-105203, ChoKB shRNA Plasmid (h): sc-105203-SH and ChoKB shRNA (h) Lentiviral Particles: sc-105203-V.

Molecular Weight of ChoKB: 42 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.

SELECT PRODUCT CITATIONS

- Esmaili, M., Bathen, T.F., Engebraten, O., Maelandsmo, G.M., Gribbestad, I.S. and Moestue, S.A. 2013. Quantitative 31 P HR-MAS MR spectroscopy for detection of response to PI3K/mTOR inhibition in breast cancer xenografts. *Magn. Reson. Med.* E-published.

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.