

FTCD (N-20): sc-47885

BACKGROUND

58K protein antibodies are excellent for use as markers for the Golgi complex. The 58K protein has been identified as being FTCD, a bifunctional enzyme that channels one-carbon units from formiminoglutamate, a metabolite of the histidine degradation pathway, to the folate pool. Defects in FTCD are the cause of glutamate formiminotransferase deficiency (also known as formim-inoglutamicaciduria or FIGLU-uria), an autosomal recessive disorder. Features of a severe phenotype include elevated levels of formiminoglutamate (FIGLU) in the urine in response to histidine administration, megaloblastic anemia and mental retardation. Features of a mild phenotype include high urinary excretion of FIGLU in the absence of histidine administration, mild developmental delay and no hematological abnormalities.

CHROMOSOMAL LOCATION

Genetic locus: FTCD (human) mapping to 21q22.3; Ftcd (mouse) mapping to 10 C1.

SOURCE

FTCD (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FTCD of human origin.

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-47885 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

FTCD (N-20) is recommended for detection of FTCD isoforms A, D, E and C 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).

FTCD (N-20) is also recommended for detection of FTCD isoforms A, D, E and C in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FTCD siRNA (h): sc-60662, FTCD siRNA (m): sc-60663, FTCD shRNA Plasmid (h): sc-60662-SH, FTCD shRNA Plasmid (m): sc-60663-SH, FTCD shRNA (h) Lentiviral Particles: sc-60662-V and FTCD shRNA (m) Lentiviral Particles: sc-60663-V.

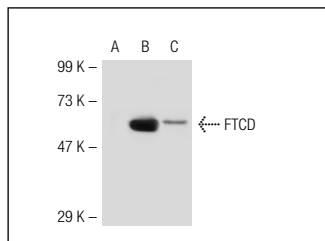
Molecular Weight of FTCD: 58 kDa.

Positive Controls: rat liver extract: sc-2395 or FTCD (m2): 293T Lysate: sc-120329.

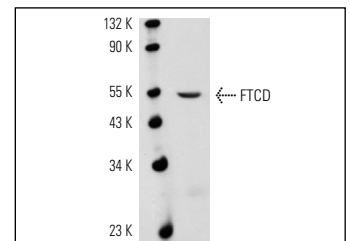
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



FTCD (N-20): sc-47885. Western blot analysis of FTCD expression in non-transfected: sc-117752 (A) and mouse FTCD transfected: sc-120329 (B) 293T whole cell lysates and rat liver tissue extract (C).



FTCD (N-20): sc-47885. Western blot analysis of FTCD expression in rat liver tissue extract.

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.

MONOS
Satisfaction
Guaranteed

Try **FTCD (G-3): sc-271788** or **FTCD (58K-9): sc-53128**, our highly recommended monoclonal alternatives to FTCD (N-20).