## SANTA CRUZ BIOTECHNOLOGY, INC.

# FTCD (N-15): sc-47884



## 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 1-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 formiminoglutamicaciduria (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.

#### REFERENCES

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#### CHROMOSOMAL LOCATION

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

#### SOURCE

FTCD (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FTCD of human origin.

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47884 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

FTCD (N-15) is recommended for detection of FTCD isoforms A, D and C 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).

FTCD (N-15) is also recommended for detection of FTCD isoforms A, D and C in additional species, including equine, bovine and porcine.

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.

## **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) Immunofluo-rescence: 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.

#### **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 Satisfation Guaranteed

Try FTCD (G-3): sc-271788 or FTCD (58K-9): sc-53128, our highly recommended monoclonal alternatives to FTCD (N-15).