

CHCHD3 (Y-12): sc-164059

BACKGROUND

CHCHD3 (coiled-coil-helix-coiled-coil-helix domain-containing protein 3) is a 227 amino acid protein that contains one CHCH domain. CHCHD3 localizes to the mitochondrial matrix and may be involved in protein import. Since CHCHD3 is expressed in several pancreatic cancer cell lines, it has been suggested that it may be an appropriate marker for early diagnosis of pancreatic cancer. The gene encoding CHCHD3 maps to human chromosome 7, which is about 158 million bases long, encodes over 1,000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CHCHD3 (human) mapping to 7q32.3; Chchd3 (mouse) mapping to 6 A3.3.

SOURCE

CHCHD3 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CHCHD3 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-164059 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CHCHD3 (Y-12) is recommended for detection of CHCHD3 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 other CHCHD family members.

CHCHD3 (Y-12) is also recommended for detection of CHCHD3 in additional species, including bovine.

Suitable for use as control antibody for CHCHD3 siRNA (h): sc-89555, CHCHD3 siRNA (m): sc-142315, CHCHD3 shRNA Plasmid (h): sc-89555-SH, CHCHD3 shRNA Plasmid (m): sc-142315-SH, CHCHD3 shRNA (h) Lentiviral Particles: sc-89555-V and CHCHD3 shRNA (m) Lentiviral Particles: sc-142315-V.

Molecular Weight of CHCHD3: 26 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.

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.