

TXNDC9 (G-13): sc-109116

BACKGROUND

Thioredoxins comprise a family of small proteins that, by catalyzing the oxidation of disulfide bonds, participate in redox reactions throughout the cell. Proteins that contain thioredoxin domains do not necessarily convey the oxidative properties of thioredoxins, but generally function as disulfide isomerases that enzymatically rearrange disulfide bonds found in various proteins. TXNDC9 (thioredoxin domain-containing protein 9), also known as APACD (ATP-binding protein associated with cell differentiation), is a 226 amino acid protein that contains one thioredoxin domain and may be involved in cell differentiation events. The gene encoding TXNDC9 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which maps to chromosome 2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TXNDC9 (human) mapping to 2q11.2; Txndc9 (mouse) mapping to 1 B.

SOURCE

TXNDC9 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TXNDC9 of human origin.

STORAGE

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

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-109116 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TXNDC9 (G-13) is recommended for detection of TXNDC9 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).

TXNDC9 (G-13) is also recommended for detection of TXNDC9 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TXNDC9 siRNA (h): sc-94867, TXNDC9 siRNA (m): sc-154824, TXNDC9 shRNA Plasmid (h): sc-94867-SH, TXNDC9 shRNA Plasmid (m): sc-154824-SH, TXNDC9 shRNA (h) Lentiviral Particles: sc-94867-V and TXNDC9 shRNA (m) Lentiviral Particles: sc-154824-V.

Molecular Weight of TXNDC9: 27 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

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.

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.