



Txl-2 (T-18): sc-103308

BACKGROUND

Thioredoxin (Trx) is a redox protein that is found in several species, such as bacteria, plants and mammals, and contains a conserved active site, consisting of Trp-Cys-Gly-Pro-Cys. Trx acts as a hydrogen donor for ribonucleotide reductase, modulates the DNA-binding activity of several transcription factors, stimulates cell growth, is an inhibitor of apoptosis and plays a role in the protection against oxidative stress. Txl-2 (Thioredoxin-like protein 2), also known as Thioredoxin domain-containing protein 6, is a 330 amino acid cytoplasmic protein that contains a domain that is evolutionarily related to Trx's active domain, however it does not have detectable catalytic activity. Txl-2 is expressed in spermatid tail and cilia of lung epithelium, therefore it may play a role in the regulation of microtubule physiology. Txl-2 is the antigen that the MC3 antibody recognizes in cases of colorectal cancer. There are three isoforms of Txl-2 that are produced as a result of alternative splicing events.

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CHROMOSOMAL LOCATION

Genetic locus: TXNDC6 (human) mapping to 3q22.3.

SOURCE

Txl-2 (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Txl-2 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-103308 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Txl-2 (T-18) is recommended for detection of Txl-2 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).

Suitable for use as control antibody for Txl-2 siRNA (h): sc-78475, Txl-2 shRNA Plasmid (h): sc-78475-SH and Txl-2 shRNA (h) Lentiviral Particles: sc-78475-V.

Molecular Weight of Txl-2: 30 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.