

TPP- α (C-14): sc-22004

BACKGROUND

Tocopherol transfer protein α (TPP- α) is a cytosolic liver protein which binds α -tocopherol (vitamin E) and enhances its transfer between separate membranes. Defects in TPP- α cause ataxia with isolated vitamin E deficiency (AVED), a rare autosomal recessive neurogenerative progressive disorder characterized by reduced plasma levels of vitamin E. AVED causes peripheral neuropathy and a loss of balance and coordination. In addition to neurological symptoms, some individuals with AVED may also display eye abnormalities, disorders affecting the heart muscles (cardiomyopathy) and an abnormal curvature of the spine (scoliosis). Friedreich's ataxia, a disease which causes muscle weakness and ataxia, is similar to AVED in clinical presentation and is the most common inherited ataxia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TPPA (human) mapping to 8q12.3; Ttpa (mouse) mapping to 4 A3.

SOURCE

TPP- α (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TPP- α 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-22004 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TPP- α (C-14) is recommended for detection of TPP- α 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).

Suitable for use as control antibody for TPP- α siRNA (h): sc-61734, TPP- α siRNA (m): sc-61735, TPP- α shRNA Plasmid (h): sc-61734-SH, TPP- α shRNA Plasmid (m): sc-61735-SH, TPP- α shRNA (h) Lentiviral Particles: sc-61734-V and TPP- α shRNA (m) Lentiviral Particles: sc-61735-V.

Molecular Weight of TPP- α : 32 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.