

Wolframin (E-18): sc-47937

BACKGROUND

The Wolframin gene encodes a protein found in endoplasmic reticulum membrane of several tissues including brain, pancreas, lung and placenta. Loss-of-function mutations in both alleles result in Wolfram syndrome (also known as DIDMOAD, an autosomal recessive disorder that causes juvenile diabetes mellitus, diabetes insipidus, optic atrophy and a number of neurological symptoms including deafness, ataxia and peripheral neuropathy. A large number and variety of mutations in this gene, particularly in exon 8, can be associated with Wolfram syndrome. Mutations in this gene can also cause autosomal dominant deafness 6 (DFNA6), also known as DFNA14 or DFNA38.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: WFS1 (human) mapping to 4p16.1; Wfs1 (mouse) mapping to 5 B3.

SOURCE

Wolframin (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Wolframin 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, ready P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Wolframin (E-18) is recommended for detection of Wolframin 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).

Wolframin (E-18) is also recommended for detection of Wolframin in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Wolframin siRNA (h): sc-61804, Wolframin siRNA (m): sc-61805, Wolframin shRNA Plasmid (h): sc-61804-SH, Wolframin shRNA Plasmid (m): sc-61805-SH, Wolframin shRNA (h) Lentiviral Particles: sc-61804-V and Wolframin shRNA (m) Lentiviral Particles: sc-61805-V.

Molecular Weight of Wolframin: 100 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.