

# X123 (S-14): sc-165908

## BACKGROUND

Friedreich's ataxia is an inherited disease that is characterized by a progressive degeneration of the spinal cord and nerve tissue. Caused by a mutated gene region on chromosome 9 that results in mitochondrial malfunction, Friedreich's ataxia can lead to a variety of conditions including speech problems, vision impairment, muscle weakness, diabetes and scoliosis. X123, also known as C9orf61 (chromosome 9 open reading frame 61), is a 289 amino acid protein that is expressed at high levels in skeletal muscle and at lower levels in brain, heart and lung. The gene encoding X123 is located within the Friedreich's ataxia region on chromosome 9, suggesting a possible role for X123 in the pathogenesis of this disease.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: FAM189A2 (human) mapping to 9q21.11; Fam189a2 (mouse) mapping to 19 B.

## SOURCE

X123 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of X123 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-165908 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

X123 (S-14) is recommended for detection of X123 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 X123 siRNA (h): sc-92775, X123 siRNA (m): sc-155369, X123 shRNA Plasmid (h): sc-92775-SH, X123 shRNA Plasmid (m): sc-155369-SH, X123 shRNA (h) Lentiviral Particles: sc-92775-V and X123 shRNA (m) Lentiviral Particles: sc-155369-V.

Molecular Weight of X123: 32 kDa.

Positive Controls: PC-12 cell lysate: sc-2250.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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](http://www.scbt.com) or our catalog for detailed protocols and support products.