

# FRG1B (S-11): sc-85570



The Power to Question

## BACKGROUND

The FRG1 (FSHD region gene 1) protein is a 258 amino acid nuclear protein that is thought to be involved in pre-messenger RNA splicing. FRG1 plays a role in processing pre-rRNA, assembling rRNA into ribosomal subunits and may also be involved in pre-mRNA splicing. Facioscapulohumeral muscular dystrophy (FSHD) is a disease that is associated with internal deletions among the tandem array of D4Z4 repeats on chromosome 4q35, a subtelomeric region of chromosome 4 that contains the FRG1 gene. The muscle degeneration that is common in patients with FSHD results from increased expression of genes proximal to the deletion, including FRG1. As a member of the FRG1 family, FRG1B is a 182 amino acid protein that shares significant sequence similarity to FRG1. The gene encoding FRG1B maps to human chromosome 20, which houses over 600 genes and comprises nearly 2% of the human genome. Since the FRG1B gene is not localized to chromosome 4q35, it is unlikely that it is also implicated in FSHD.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: FRG1B (human) mapping to 20q11.1.

## SOURCE

FRG1B (S-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FRG1B 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-85570 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

FRG1B (S-11) is recommended for detection of FRG1B 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 FRG1B siRNA (h): sc-75067, FRG1B shRNA Plasmid (h): sc-75067-SH and FRG1B shRNA (h) Lentiviral Particles: sc-75067-V.

Molecular Weight of FRG1B: 21 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](http://www.scbt.com) or our catalog for detailed protocols and support products.