

# sulfamidase (C-18): sc-79741

## BACKGROUND

sulfatases are enzymes that hydrolyse a diverse range of sulfate esters. Deficiency of lysosomal sulfatases leads to human diseases characterized by the accumulation of either GAGs (glycosaminoglycans) or sulfolipids. sulfamidase, also known as HSS, SFMD, MPS3A or SGSH, is a 502 amino acid lysosome that belongs to the sulfatase family. It has been suggested that sulfamidase may be involved in the lysosomal degradation of heparan sulfate. Defects in the gene encoding sulfamidase are the cause of Sanfilippo syndrome A, an autosomal recessive lysosomal storage disease caused by impaired degradation of heparan sulfate. Sanfilippo syndrome A is characterized by severe central nervous system degeneration but relatively mild somatic manifestations.

## REFERENCES

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## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## CHROMOSOMAL LOCATION

Genetic locus: SGSH (human) mapping to 17q25.3; Sgsh (mouse) mapping to 11 E2.

## SOURCE

sulfamidase (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of sulfamidase 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-79741 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

sulfamidase (C-18) is recommended for detection of sulfamidase 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).

sulfamidase (C-18) is also recommended for detection of sulfamidase in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for sulfamidase siRNA (h): sc-76607, sulfamidase siRNA (m): sc-76608, sulfamidase shRNA Plasmid (h): sc-76607-SH, sulfamidase shRNA Plasmid (m): sc-76608-SH, sulfamidase shRNA (h) Lentiviral Particles: sc-76607-V and sulfamidase shRNA (m) Lentiviral Particles: sc-76608-V.

Molecular Weight of sulfamidase: 62 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.