

Arylsulfatase B (S-15): sc-107157

BACKGROUND

Arylsulfatase B, also known as ARSB, ASB, MPS6 or G4S, is a 533 amino acid lysosomal protein that belongs to the sulfatase family. Existing as both a monomer and a homodimer, Arylsulfatase B uses calcium as a cofactor to hydrolyze C4-sulfate groups of N-Acetyl-D-galactosamine, dermatan sulfate and chondroitin sulfate, thereby playing a role in lysosomal degradation. Defects in the gene encoding Arylsulfatase B are the cause of mucopolysaccharidosis type 6 (MPS6) and multiple sulfatase deficiency (MSD), the first of which is a lysosomal storage disease that is characterized by short stature, stiff joints, skeletal malformations, corneal clouding, hepatosplenomegaly and cardiac abnormalities. In contrast, MSD is characterized by a decreased activity of all known sulfatasases and is usually associated with mucopolysaccharidosis, chondrodysplasia punctata, hydrocephalus, ichthyosis and neurologic deterioration. Multiple isoforms of Arylsulfatase B exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ARSB (human) mapping to 5q14.1.

SOURCE

Arylsulfatase B (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Arylsulfatase B 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-107157 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Arylsulfatase B (S-15) is recommended for detection of Arylsulfatase B 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); non cross-reactive with other Arylsulfatase family members.

Arylsulfatase B (S-15) is also recommended for detection of Arylsulfatase B in additional species, including equine.

Suitable for use as control antibody for Arylsulfatase B siRNA (h): sc-91951, Arylsulfatase B shRNA Plasmid (h): sc-91951-SH and Arylsulfatase B shRNA (h) Lentiviral Particles: sc-91951-V.

Molecular Weight of mature Arylsulfatase B form: 47 kDa.

Molecular Weight of Arylsulfatase B precursor: 64 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.