

Arylsulfatase B (2G6): sc-517158

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 (2G6) is a mouse monoclonal antibody raised against amino acids 166-265 representing partial length Arylsulfatase B of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Arylsulfatase B (2G6) is recommended for detection of Arylsulfatase B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

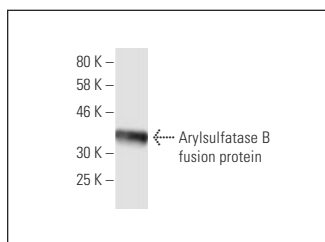
Molecular Weight of Arylsulfatase B mature form: 47 kDa.

Molecular Weight of Arylsulfatase B precursor: 64 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Arylsulfatase B (2G6): sc-517158. Western blot analysis of human recombinant Arylsulfatase B fusion protein.

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.