

IDS (H-243): sc-98741

BACKGROUND

IDS (Iduronate 2-sulfatase), also known as SIDS, is a 550 amino acid protein that localizes to the lysosome and belongs to the sulfatase family. Expressed in lung, liver, kidney and placenta, IDS uses calcium as a cofactor to catalyze the hydrolysis of select sulfate groups on dermatan sulfate, heparan sulfate and heparin and, via this catalytic activity, is essential for the lysosomal degradation of both dermatan and heparan sulfate. Defects in the gene encoding IDS are the cause of mucopolysaccharidosis type 2 (MPS2), more commonly known as Hunter syndrome, which is characterized by skeletal deformities, hepatosplenomegaly and progressive cardiopulmonary deterioration, as well as neurological damage and, in some cases, death. IDS exists as two alternatively spliced isoforms, designated long and short.

REFERENCES

1. Wilson, P.J., Meaney, C.A., Hopwood, J.J. and Morris, C.P. 1993. Sequence of the human iduronate 2-sulfatase (IDS) gene. *Genomics* 17: 773-775.
2. Malmgren, H., Carlberg, B.M., Pettersson, U. and Bondeson, M.L. 1995. Identification of an alternative transcript from the human iduronate-2-sulfatase (IDS) gene. *Genomics* 29: 291-293.

CHROMOSOMAL LOCATION

Genetic locus: IDS (human) mapping to Xq28; Ids (mouse) mapping to X A7.1.

SOURCE

IDS (H-243) is a rabbit polyclonal antibody raised against amino acids 92-334 mapping within an internal region of IDS 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.

APPLICATIONS

IDS (H-243) is recommended for detection of IDS of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IDS (H-243) is also recommended for detection of IDS in additional species, including canine and bovine.

Suitable for use as control antibody for IDS siRNA (h): sc-90917, IDS siRNA (m): sc-146143, IDS shRNA Plasmid (h): sc-90917-SH, IDS shRNA Plasmid (m): sc-146143-SH, IDS shRNA (h) Lentiviral Particles: sc-90917-V and IDS shRNA (m) Lentiviral Particles: sc-146143-V.

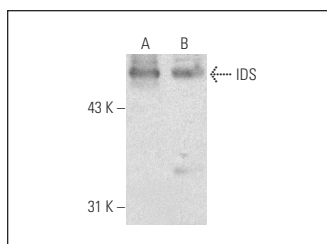
Molecular Weight of IDS: 62 kDa.

Positive Controls: mouse brain extract: sc-2253, mouse pancreas extract: sc-364244 or WI-38 whole cell lysate: sc-364260.

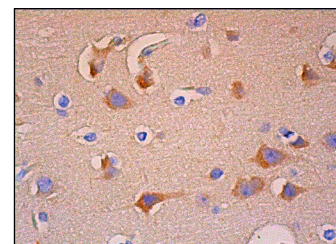
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



IDS (H-243): sc-98741. Western blot analysis of IDS expression in mouse brain (A) and mouse pancreas (B) tissue extracts.



IDS (H-243): sc-98741. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells.

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.


 MONOS
Satisfaction
Guaranteed

Try **IDS (B-5): sc-365047** or **IDS (E-4): sc-365149**, our highly recommended monoclonal alternatives to IDS (H-243).