# IDS (C-15): sc-131555



The Power to Question

## **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.

## CHROMOSOMAL LOCATION

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

#### **SOURCE**

IDS (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IDS of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131555 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **RESEARCH USE**

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

## **APPLICATIONS**

IDS (C-15) is recommended for detection of IDS isoform Long of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffinembedded 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); non cross-reactive with IDS isoform Short.

IDS (C-15) is also recommended for detection of IDS isoform Long in additional species, including canine, bovine and porcine.

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.

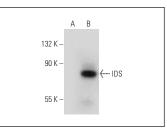
Molecular Weight of IDS: 62 kDa.

Positive Controls: IDS (m): 293 Lysate: sc-178771 or WI-38 whole cell lysate: sc-364260.

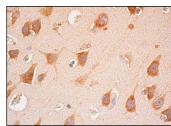
#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## **DATA**



IDS (C-15): sc-131555. Western blot analysis of IDS expression in non-transfected: sc-110760 (**A**) and mouse IDS transfected: sc-178771 (**B**) 293 whole cell byestes



IDS (C-15): sc-131555. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells, glial cells and endothelial cells.

## **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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try IDS (B-5): sc-365047 or IDS (E-4): sc-365149, our highly recommended monoclonal alternatives to IDS (C-15).

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