abcam

Product datasheet

# Recombinant Human Iduronate 2 sulfatase/SIDS protein ab158721

1 Image

## Description

| | |
|---|---|
| **Product name** | Recombinant Human Iduronate 2 sulfatase/SIDS protein |
| **Expression system** | Wheat germ |
| **Protein length** | Full length protein |
| **Animal free** | No |
| **Nature** | Recombinant |
| **Species** | Human |
| **Sequence** | MPPPRTGRGLLWLGLVLSSVCVALGSETQANSTTDALNV LLIIVDDLRPS LGCYGDKLVRSPNIDQLASHSLLFQNAFAQQAVCAPSRV SFLTGRRPDTT RLYDFNSYWRVHAGNFSTIPQYFKENGYVTMSVGKVFHP GISSNHTDDSP YSWSFPPYHPSSEKYENTKTCRGPDGELHANLLCPVDVL DVPEGTLPDKQ STEQAIQLLEKMKTSASPFFLAVGYHKPHIPFRYPKEFQKL YPLENITLA PDPEVPDGLPPVAYNPWMDIRQREDVQALNISVPYGPIPV DFQEDQSSTG FRLKTSSTRKYK |
| **Amino acids** | 1 to 312 |
| **Tags** | GST tag N-Terminus |

## Specifications

Our **Abpromise guarantee** covers the use of **ab158721** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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| **Applications** | Western blot<br>ELISA |
| **Form** | Liquid |
| **Additional notes** | This product was previously labelled as Iduronate 2 sulfatase. |

## Preparation and Storage

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|---|---|
| **Stability and Storage** | Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles.<br>pH: 8.00<br>Constituents: 0.31% Glutathione, 0.79% Tris HCl |

## General Info

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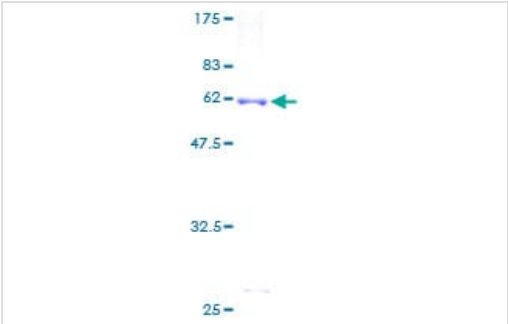
|---|---|
| **Function** | Required for the lysosomal degradation of heparan sulfate and dermatan sulfate. |
| **Tissue specificity** | Liver, kidney, lung, and placenta. |
| **Involvement in disease** | Defects in IDS are the cause of mucopolysaccharidosis type 2 (MPS2) [MIM:309900]; also known as Hunter syndrome. MPS2 is an X-linked lysosomal storage disease characterized by intracellular accumulation of heparan sulfate and dermatan sulfate and their excretion in urine. Most children with MPS2 have a severe form with early somatic abnormalities including skeletal deformities, hepatosplenomegaly, and progressive cardiopulmonary deterioration. A prominent feature is neurological damage that presents as developmental delay and hyperactivity but progresses to mental retardation and dementia. They die before 15 years of age, usually as a result of obstructive airway disease or cardiac failure. In contrast, those with a mild form of MPS2 may survive into adulthood, with attenuated somatic complications and often without mental retardation. |
| **Sequence similarities** | Belongs to the sulfatase family. |
| **Post-translational modifications** | The conversion to 3-oxoalanine (also known as C-formylglycine, FGly), of a serine or cysteine residue in prokaryotes and of a cysteine residue in eukaryotes, is critical for catalytic activity. |
| **Cellular localization** | Lysosome. |

## Images




SDS-PAGE - Recombinant Human Iduronate 2 sulfatase/SIDS protein (ab158721)

ab158721 on a 12.5% SDS-PAGE stained with Coomassie Blue.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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