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.

Applications	Western blot ELISA
Form	Liquid
Additional notes	This product was previously labelled as Iduronate 2 sulfatase.

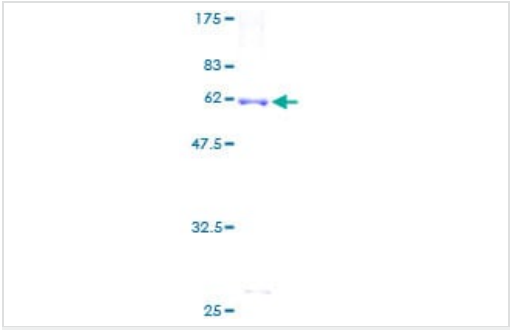
Preparation and Storage

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

General Info

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.

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