

# Recombinant Human Iduronate 2-Sulfatase/IDS Protein (His Tag)



Catalog Number:PKSH031672

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

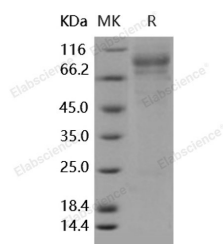
## Description

<b>Synonyms</b>	IDS;MPS2;SIDS
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Pro 550
<b>Accession</b>	NP_000193.1
<b>Calculated Molecular Weight</b>	61.0 kDa
<b>Observed molecular weight</b>	85-95 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measured by its ability to hydrolyze the substrate 4-Nitrocatechol Sulfate (PNCS). The specific activity is > 1.0 pmoles/min/μg.

## Properties

<b>Purity</b>	> 87 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per μg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Data



> 87 % as determined by reducing SDS-PAGE.

## Background

Iduronate 2-Sulfatase, also known as IDS, is a member of the highly conserved sulfatase family of enzymes that catalyze the hydrolysis of O- and N-sulfate esters from a variety of substrates. The human Iduronate 2-Sulfatase/IDS consists of a signal peptide, a pro peptide and a mature chain that may be further processed into two chains. Among the identified 18 human sulfatases, Iduronate 2-Sulfatase/IDS is required for the lysosomal degradation of the glycosaminoglycans (GAG), heparan sulfate and dermatan sulfate. Multiple mutations in this X-chromosome localized gene result in Iduronate 2-Sulfatase/IDS enzymatic deficiency, and lead to the sex-linked Mucopolysaccharidosis Type II (MPS II), also known as

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017

# Recombinant Human Iduronate 2-Sulfatase/IDS Protein (His Tag)



Catalog Number:PKSH031672

---

Hunter Syndrome characterized by the lysosomal accumulation of the GAG and their excretion in urine. MPS II has a wide spectrum of clinical manifestations ranging from mild to severe due to the level of Iduronate 2-Sulfatase/IDS enzyme. Retroviral-mediated Iduronate 2-Sulfatase/IDS gene transfer into lymphoid cells would be a promising gene therapeutic strategy.

---

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017