

Active Recombinant Mouse Iduronate 2-Sulfatase, His-tagged

Cat. No. Ids-1974M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Ids protein was expressed in Murine myeloma cell line. Thr36-Pro552(Asp177-Lys179 deletion), with an N-terminal signal sequence and a C-terminal10-His tag.
Species	Mouse
Source	Mammalian Cells
ProteinLength	36-552;177-179 a.a.
Description	As a member of the sulfatase family, Iduronate 2-Sulfatase encoded by the Ids gene is required for the lysosomal degradation of the glycosaminoglycans (GAG) heparan sulfate and dermatan sulfate. It hydrolyzes the 2-sulfate group of the L-iduronate 2-sulfate units of the GAG. The Ids deficiency results in mucopolysaccharidosis II (MPS II or Hunter syndrome), an X-linked inborn error leading to lysosomal accumulation of the GAG and their excretion in urine. MPS II has a wide spectrum of clinical manifestations ranging from mild to severe. The mouse Ids has sulfatase activity described in the Activity Assay Protocol.
Form	Supplied as a 0.2 umfiltered solution in Tris and NaCl.
N-terminalSequence	Thr36
MolecularWeight	60 kDa

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Activity	Measured by its ability to hydrolyze the substrate 4-Nitrocatechol Sulfate (PNCS). The specific activity is > 1.0 pmol/min/μg, as measured under the described conditions.
Endotoxin Level	<1.0 EU per 1 μg of the protein by the LAL method.
SDS-PAGE	77 kDa, reducing conditions.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -20 to -70°C as supplied. 3 months, -20 to -70°C under sterile conditions after opening.

GENE INFORMATION

Gene Name	Ids iduronate 2-sulfatase [Mus musculus]
Official Symbol	Ids
Synonyms	Ids; iduronate 2-sulfatase; AW214631; iduronate sulfatase; iduronate-2-sulfatase; alpha-L-iduronate sulfate sulfatase; EC 3.1.6.13
Gene ID	15931
mRNA Refseq	NM_010498
Protein Refseq	NP_034628
UniProt ID	Q08890

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Chromosome Location	X
Pathway	Dermatan sulfatedegradation; Glycosaminoglycan degradation; Heparan sulfate degradation; Lysosome; Metabolic pathways
Function	catalytic activity;hydrolase activity; iduronate-2-sulfatase activity; metal ion binding; protein binding; sulfuric ester hydrolaseactivity

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