

## Product datasheet

# Human IDS (Iduronate 2 sulfatase/SIDS) knockout HeLa cell lysate ab258462

2 Images

### Overview

<b>Product name</b>	Human IDS (Iduronate 2 sulfatase/SIDS) knockout HeLa cell lysate
<b>Product overview</b>	Knockout cell lysate achieved by CRISPR/Cas9.
<b>Parental Cell Line</b>	HeLa
<b>Organism</b>	Human
<b>Mutation description</b>	Knockout achieved by using CRISPR/Cas9, 10 bp deletion in exon4 and 1 bp insertion in exon4.
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing
<b>Reconstitution notes</b>	To use as WB control, resuspend the lyophilizate in 50 µL of LDS* Sample Buffer to have a final concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M DTT. <i>*Usage of SDS sample buffer is not recommended with these lyophilized lysates.</i>

### Notes

**Lysate preparation:** Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found [here](#). Please refer to our lysis protocol for further details on how our lysates are prepared.

**User storage instructions:** Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

**[See here for more information on knockout cell lysates.](#)**

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## Properties

**Storage instructions** Store at -80°C. Please refer to protocols.

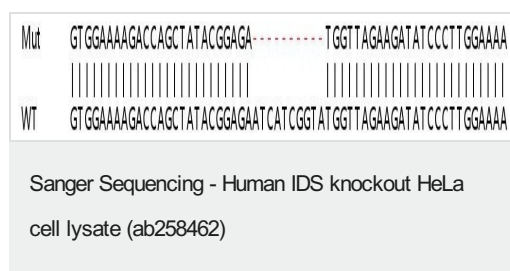
Components	1 kit
ab262422 - Human IDS knockout HeLa cell lysate	1 x 100µg
ab255929 - Human wild-type HeLa cell lysate	1 x 100µg

<b>Cell type</b>	epithelial
<b>Disease</b>	Adenocarcinoma
<b>Gender</b>	Female
<b>STR Analysis</b>	Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 WWA: 16, 18 TH01: 7 TPOX: 8,12 CSF1PO: 9, 10

## Target

<b>Function</b>	Required for the lysosomal degradation of heparan sulfate and dermatan sulfate.
<b>Tissue specificity</b>	Liver, kidney, lung, and placenta.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Belongs to the sulfatase family.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	Lysosome.

## Images



Allele-1: 10 bp deletion in exon4

Mut	GATAAGGTGGAAGACGCTATACGGAGAATCATCGGTATGGTTAGAAGATATCCCT
WT	GATAAGGTGGAAGACGCTATACGGAGAATCATCGGTATGGTTAGAAGATATCCCT

Sanger Sequencing - Human IDS knockout HeLa  
cell lysate (ab258462)

Allele-2: 1 bp insertion in exon4

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