

Client: ARUP Example Report Only  
500 Chipeta Way  
Salt Lake City, UT 84108  
UNITED STATES

Physician: Doctor, Example

**Patient: Patient, Example Abnormal**

**DOB:** 8/16/2002  
**Sex:** Female  
**Patient Identifiers:** 41648  
**Visit Number (FIN):** 01234567890ABC  
**Collection Date:** 8/16/2022 15:51

**Mucopolysaccharidoses Type 1/2, Total Heparan Sulfate and NRE (Sensi-Pro(R)) Quantitative, Serum or Plasma**

ARUP test code 3003566

MPS 1/2 Serum/Plasma Interpretation

See Note

In this sample the concentration of I2S0, non-reducing end (NRE) specific for iduronate-2-sulfatase deficiency, and the concentration of heparan sulfate were increased, with normal concentration of I0S0 and I0S6, NREs specific for iduronidase deficiency. This pattern is most consistent with mucopolysaccharidosis type II (Hunter Syndrome), however would evaluate enzyme activity together with that of other sulfatases to confirm this finding and exclude multiple sulfatase deficiency. Would also consider molecular testing. Genetic evaluation is recommended. Clinical correlation is necessary for further interpretation of this result.

INTERPRETIVE INFORMATION: MPS 1/2, Serum/Plasma

Total Heparan Sulfate, Serum/Plasma is a sum of the internal disaccharides D0A0 and D0S0.  
NRE = Non Reducing End

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Total Heparan Sulfate, Serum/Plasma	<b>589 ng/mL</b>	<b>H</b>	(Ref Interval: <=338)
IoSo (MPS 1 NRE), Serum/Plasma	<5 ng/mL		(Ref Interval: <=12)
IoS6 (MPS 1 NRE), Serum/Plasma	<5 ng/mL		(Ref Interval: <=12)
I2So (MPS 2 NRE), Serum/Plasma	<b>52 ng/mL</b>	<b>H</b>	(Ref Interval: <=43)
EER MPS 1/2 Serum/Plasma	See Note Authorized individuals can access the ARUP Enhanced Report using the following link: 		

**H=High, L=Low, \*=Abnormal, C=Critical**

Unless otherwise indicated, testing performed at:

ARUP LABORATORIES | 800-522-2787 | aruplab.com  
500 Chipeta Way, Salt Lake City, UT 84108-1221  
Jonathan R. Genzen, MD, PhD, Laboratory Director

Patient: Patient, Example Abnormal  
ARUP Accession: 22-228-122415  
Patient Identifiers: 41648  
Visit Number (FIN): 01234567890ABC  
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VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
MPS 1/2 Serum/Plasma Interpretation	22-228-122415	8/16/2022 3:51:00 PM	8/16/2022 4:43:43 PM	8/16/2022 4:53 00 PM
Total Heparan Sulfate, Serum/Plasma	22-228-122415	8/16/2022 3:51:00 PM	8/16/2022 4:43:43 PM	8/16/2022 4:53 00 PM
IoSo (MPS 1 NRE), Serum/Plasma	22-228-122415	8/16/2022 3:51:00 PM	8/16/2022 4:43:43 PM	8/16/2022 4:53 00 PM
IoS6 (MPS 1 NRE), Serum/Plasma	22-228-122415	8/16/2022 3:51:00 PM	8/16/2022 4:43:43 PM	8/16/2022 4:53 00 PM
I2So (MPS 2 NRE), Serum/Plasma	22-228-122415	8/16/2022 3:51:00 PM	8/16/2022 4:43:43 PM	8/16/2022 4:53 00 PM
EER MPS 1/2 Serum/Plasma	22-228-122415	8/16/2022 3:51:00 PM	8/16/2022 4:43:43 PM	8/16/2022 4:53 00 PM

END OF CHART

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