

Client: Example Client ABC123  
123 Test Drive  
Salt Lake City, UT 84108  
UNITED STATES

Physician: Doctor, Example

**Patient: Patient, Example**

**DOB:** 5/5/2014  
**Gender:** Unknown  
**Patient Identifiers:** 01234567890ABCD, 012345  
**Visit Number (FIN):** 01234567890ABCD  
**Collection Date:** 00/00/0000 00:00

**Mucopolysaccharidoses Type 4A/6 Total Chondroitin Sulfate and Dermatan Sulfate with NRE (Sensi-Pro(R)) Quantitative, Serum**

ARUP test code 3003487

MPS 4A/6, Serum Interpretation

See Note

In this sample the concentration of a6, non-reducing end (NRE) specific for N-acetylgalactosamine-6-sulfatase deficiency, was mildly elevated with normal concentration of chondroitin/dermatan sulfate. Although patients with MPS IVA usually show markedly increased concentration of a6 and of chondroitin/dermatan sulfate, the mild elevation of a6 is suggestive of N-acetylgalactosamine-6-sulfatase deficiency (Morquio syndrome type IVA). 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.

Results reviewed and interpreted by [REDACTED]

INTERPRETIVE INFORMATION: MPS 4A/6, Serum Interpretation

Total Chondroitin Sulfate (CS) and Dermatan Sulfate (DS), Serum is a sum of the internal disaccharides D0a0, D0a4, and D0a6. 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.

Chondroitin and Dermatan Sulfate, Serum	11971 ng/mL	(Ref Interval: 10300-23500)
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a4 (MPS 6 NRE), Serum	36 ng/mL	(Ref Interval: 21-62)
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a6 (MPS 4A NRE), Serum	<b>90 ng/mL H</b>	<b>(Ref Interval: &lt;=20)</b>
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a4/a6 Ratio, Serum	0.400
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**H=High, L=Low, \*=Abnormal, C=Critical**

EER MPS 4A/6 Serum

See Note

Authorized individuals can access the ARUP Enhanced Report using the following link:

[Redacted Link]

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
MPS 4A/6, Serum Interpretation	24-127-125411	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Chondroitin and Dermatan Sulfate, Serum	24-127-125411	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
a4 (MPS 6 NRE), Serum	24-127-125411	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
a6 (MPS 4A NRE), Serum	24-127-125411	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
a4/a6 Ratio, Serum	24-127-125411	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
EER MPS 4A/6 Serum	24-127-125411	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

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