

# **Test Definition: UHSD2**

Hemosiderin, Random, Urine

# Overview

## **Useful For**

Detecting hemosiderinuria, secondary to excess hemolysis, as in incompatible blood transfusions, severe acute hemolytic anemia, or hemochromatosis for external patients.

Method Name Rous Method

NY State Available

Yes

## Specimen

Specimen Type Urine

Specimen Required Container/Tube: Plastic urine container Specimen Volume: 13 mL Collection Instructions: 1. Collect a random urine specimen. 2. No preservative.

Specimen Minimum Volume

12 mL

#### **Reject Due To**

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

#### **Specimen Stability Information**

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	7 days	
	Frozen	7 days	
	Ambient	2 hours	

## **Clinical & Interpretive**



## **Clinical Information**

When the plasma hemoglobin level is 50 to 200 mg/dL after hemolysis, the capacity of haptoglobin to bind hemoglobin is exceeded, and hemoglobin readily passes through the glomeruli of the kidney. Part of the hemoglobin is absorbed by the proximal tubular cells where the hemoglobin iron is converted to hemosiderin. When these tubular cells are later shed into the urine, hemosiderinuria results. If the hemoglobin cannot be absorbed into the tubular cells, hemoglobinuria results.

Hemosiderin is found as yellow-brown granules that are free or in epithelial cells and occasionally in casts in an acidic or neutral urine.

#### **Reference Values**

Negative

#### Interpretation

A positive hemosiderin indicates excess red cell destruction.

### Cautions

No significant cautionary statements

#### **Clinical Reference**

1. Brunzel N. Chemical examination of urine. Fundamentals of Urine and Body Fluid Analysis. 4th ed. Saunders; 2018:98-99

 Henry JB. Clinical Diagnosis and Management by Laboratory Methods. 18th ed. WB Saunders Company; 1991:412-413
Cappellini MD, Lo SF, Swinkles DW. Hemoglobin, iron, bilirubin. In: Rifai N, Horvath AR, Wittwer CT, eds. Tietz Textbook of Clinical Chemistry and Molecular Diagnostics. 6th ed. Elsevier; 2018:747

## Performance

## **Method Description**

The Prussian blue reaction is used to demonstrate hemosiderin as first described by Rous in 1918. (Brunzel N. Microscopic examination of urine sediment. Fundamentals of Urine and Body Fluid Analysis. 4th ed. Saunders; 2018:392)

#### PDF Report

No

## Day(s) Performed Monday through Sunday

## **Report Available**

1 day

Specimen Retention Time 2 days

## **Performing Laboratory Location**



# **Test Definition: UHSD2**

Hemosiderin, Random, Urine

Rochester

# Fees & Codes

#### Fees

- Authorized users can sign in to <u>Test Prices</u> for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

### **Test Classification**

This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. It has not been cleared or approved by the US Food and Drug Administration.

#### **CPT Code Information**

83070

### LOINC<sup>®</sup> Information

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UHSD2	Hemosiderin, Random, U	4644-1
Test ID	Test Order Name	Order LOINC <sup>®</sup> Value

Result ID	Test Result Name	Result LOINC <sup>®</sup> Value
HSDU2	Hemosiderin, Random, U	4644-1