

## Overview

### Useful For

Investigation of possible acute interstitial nephritis

### Method Name

Hansel Stain

### NY State Available

Yes

## Specimen

### Specimen Type

Urine

### Specimen Required

**Container/Tube:** Unstained cytospin slide

**Specimen Volume:** 1 slide

#### Collection Instructions:

1. Collect a random urine specimen.
2. Centrifuge 10 mL of a random urine collection.
3. Pour off supernatant. Assess urine sediment for presence of white blood cells (WBC). If no WBC are seen, the eosinophil test cannot be performed. If WBC are present, prepare slides using the centrifuged sediment.
4. The unstained slide should be prepared within 2 hours of collection. Only an unstained slide will be accepted. **Any other specimen, including the raw urine specimen, will be rejected.**
5. Centrifuge urine in cytospin centrifuge at speed of 750 rpm for 5 minutes.
6. Slides need to be labeled with patient name and date of birth
7. Guidelines for slide preparation. Use the sediment to prepare slides as follows:
  - a. 150 mcL of sample for 1 to 3 WBC/high power field (hpf)
  - b. 100 mcL of sample for moderate to normal sediment (<50 cell/hpf)
  - c. 50 mcL of sample for heavier sediment (>50 cells/hpf)
  - d. 25 mcL for packed fields of sediment

### Forms

If not ordering electronically, complete, print, and send a [Renal Diagnostics Test Request](#) (T830) with the specimen.

### Specimen Minimum Volume

See Specimen Required

### Reject Due To

Stained slides Urine aliquots	Reject
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**Specimen Stability Information**

Specimen Type	Temperature	Time	Special Container
Urine	Ambient (preferred)	14 days	SLIDE
	Refrigerated	14 days	SLIDE
	Frozen	14 days	SLIDE

**Clinical & Interpretive****Clinical Information**

Eosinophils are white blood cells that normally do not appear in urine. The presence of eosinophils in the urine is seen in acute interstitial nephritis, which is caused by an allergic reaction, typically to drugs.

**Reference Values**

0%

**Interpretation**

Results of greater than 5% eosinophils are indicative of acute interstitial nephritis; results between 1% and 5% eosinophils are indeterminant.

**Cautions**

No significant cautionary statements

**Clinical Reference**

1. Hansel FK. In: Clinical Allergy. CV Mosby Company; 1953
2. Brunzel NA. Microscopic examination of urine sediment. In: Fundamentals of Urine and Body Fluid Analysis. 4th ed. Saunders; 2017:141
3. Muriithi AK, Leung N, Valeri AM, et al. Biopsy-proven acute interstitial nephritis, 1993-2011: a case series. Am J Kidney Dis. 2014;64(4):558-566. doi:10.1053/j.ajkd.2014.04.027

**Performance****Method Description**

Hansel stain.(Brunzel NA, ed: Microscopic examination of urine sediment. In: Fundamentals of Urine and Body Fluids Analysis. 3rd ed. Elsevier; 2012:171-172)

**PDF Report**

No

**Day(s) Performed**

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Monday through Sunday

**Report Available**

Same day/1 day

**Specimen Retention Time**

Urine: 2 days; Slide: 7 days

**Performing Laboratory Location**

Mayo Clinic Laboratories - Rochester Main Campus

**Fees & Codes****Fees**

- Authorized users can sign in to [Test Prices](#) 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 has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

**CPT Code Information**

85999

**LOINC® Information**

Test ID	Test Order Name	Order LOINC® Value
EOSU1	Eosinophils, U	32014-3

Result ID	Test Result Name	Result LOINC® Value
EOSU1	Eosinophils, U	In Process