

Reporting Title: Metanephrines, Fractionated, 24h, U
Performing Location: Mayo Clinic Laboratories - Rochester Superior Drive

Ordering Guidance:

Necessary Information:
24-Hour volume (in milliliters) is required.

Specimen Requirements:
Patient Preparation: Tricyclic antidepressants, labetalol, and sotalol medications may elevate levels of metanephrines producing results that cannot be interpreted. If clinically feasible, it is optimal to discontinue these medications at least 1 week before collection. For advice on assessing the risk of removing patients from these medications and alternatives, consider consultation with a specialist in endocrinology or hypertension.

Supplies: Urine Tubes, 10 mL (T068)

Container/Tube: Plastic urine tube

Specimen Volume: 10 mL

- Collection Instructions:**
1. Add 10 g (pediatric: 3 g) of boric acid or 25 mL (pediatric: 15 mL) of 50% acetic acid as preservative **at start of collection**.
 2. Collect urine for 24 hours.

Additional Information: See [Urine Preservatives-Collection and Transportation for 24-Hour Urine Specimens](#) for multiple collections.

Forms:
If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:
[-Oncology Test Request](#) (T729)
[-Renal Diagnostics Test Request](#) (T830)

Urine Preservative Collection Options:
Note: The addition of preservative **must occur prior to the start of** the collection or application of temperature controls **must occur during collection**.

Ambient (no additive)	No
Refrigerate (no additive)	OK
Frozen (no additive)	OK
50% Acetic Acid	Preferred
Boric Acid	Preferred
Diazolidinyl Urea	No
6M Hydrochloric Acid	OK
6M Nitric Acid	No
Sodium Carbonate	OK
Thymol	No
Toluene	OK

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	28 days	
	Ambient	28 days	
	Frozen	28 days	

Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
METAF	TM50	Collection Duration (h)	Plain Text	Yes
METAF	VL48	Volume (mL)	Plain Text	Yes

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
8552	Metanephrine, U	Alphanumeric	mcg/24 h	104629-1
21545	Normetanephrine, U	Alphanumeric	mcg/24 h	104631-7
83006	Total Metanephrines, U	Alphanumeric	mcg/24 h	104630-9
TM50	Collection Duration (h)	Alphanumeric		13362-9
VL48	Volume (mL)	Alphanumeric		3167-4
2434	Comment	Alphanumeric		48767-8

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

83835

Reference Values:

METANEPHRINE

Males

Normotensives

3-8 years: 29-92 mcg/24 h

9-12 years: 59-188 mcg/24 h

13-17 years: 69-221 mcg/24 h

> or =18 years: 44-261 mcg/24 h

Reference values have not been established for patients that are younger than 36 months.

Hypertensives: <400 mcg/24 h

Females

Normotensives

3-8 years: 18-144 mcg/24 h

9-12 years: 43-122 mcg/24 h

13-17 years: 33-185 mcg/24 h

> or =18 years: 30-180 mcg/24 h

Reference values have not been established for patients that are younger than 36 months.

Hypertensives: <400 mcg/24 h

NORMETANEPHRINE

Males

Normotensives

3-8 years: 34-169 mcg/24 h

9-12 years: 84-422 mcg/24 h

13-17 years: 91-456 mcg/24 h

18-29 years: 103-390 mcg/24 h

30-39 years: 111-419 mcg/24 h

40-49 years: 119-451 mcg/24 h

50-59 years: 128-484 mcg/24 h

60-69 years: 138-521 mcg/24 h

> or =70 years: 148-560 mcg/24 h

Reference values have not been established for patients that are younger than 36 months.

Hypertensives: <900 mcg/24 h

Females

Normotensives

3-8 years: 29-145 mcg/24 h

9-12 years: 55-277 mcg/24 h

13-17 years: 57-286 mcg/24 h

18-29 years: 103-390 mcg/24 h

30-39 years: 111-419 mcg/24 h

40-49 years: 119-451 mcg/24 h

50-59 years: 128-484 mcg/24 h

60-69 years: 138-521 mcg/24 h

> or =70 years: 148-560 mcg/24 h

Reference values have not been established for patients that are younger than 36 months.

Hypertensives: <900 mcg/24 h

TOTAL METANEPHRINE

Males

Normotensives

3-8 years: 47-223 mcg/24 h

9-12 years: 201-528 mcg/24 h

13-17 years: 120-603 mcg/24 h

18-29 years: 190-583 mcg/24 h

30-39 years: 200-614 mcg/24 h

40-49 years: 211-646 mcg/24 h

50-59 years: 222-680 mcg/24 h

60-69 years: 233-716 mcg/24 h

> or =70 years: 246-753 mcg/24 h

Reference values have not been established for patients that are younger than 36 months.

Hypertensives: <1,300 mcg/24 h

Females

Normotensives

3-8 years: 57-210 mcg/24 h

9-12 years: 107-394 mcg/24 h

13-17 years: 113-414 mcg/24 h

18-29 years: 142-510 mcg/24 h

30-39 years: 149-535 mcg/24 h

40-49 years: 156-561 mcg/24 h

50-59 years: 164-555 mcg/24 h

60-69 years: 171-616 mcg/24 h

> or =70 years: 180-646 mcg/24 h

Reference values have not been established for patients that are younger than 36 months.

Hypertensives: <1,300 mcg/24 h

For International System of Units (SI) conversion for Reference Values, see

www.mayocliniclabs.com/order-tests/si-unit-conversion.html