

Reporting Title: Renin Activity, P
Performing Location: Rochester

Specimen Requirements:

Patient Preparation: For 4 to 6 weeks before specimen collection, spironolactone (Aldactone) should be discontinued, as plasma renin activity cannot be interpreted if the patient is being treated with spironolactone.

Supplies: Sarstedt Aliquot Tube, 5 mL (T914)

Collection Container/Tube: Chilled, lavender top (EDTA)

Submission Container/Tube: Plastic vial

Specimen Volume: 0.8 mL

Collection Instructions:

1. Draw blood in a chilled syringe from a patient in a seated position; place specimen in a chilled, 3-mL lavender-top (EDTA) tube and mix well. Alternatively, draw blood directly in a chilled, EDTA tube.
 2. Immediately place EDTA tube into an ice-water bath until thoroughly cooled.
 3. Immediately centrifuge using a refrigerated centrifuge and aliquot plasma into a plastic vial.
- Note: If a refrigerated centrifuge is unavailable, chill the centrifuge carriers before use. Centrifuge specimen for 5 minutes or less, then promptly aliquot plasma into a plastic vial.
4. Immediately freeze plasma.

Forms:

If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:

- [General Request](#) (T239)
- [Cardiovascular Test Request](#) (T724)
- [Renal Diagnostics Test Request](#) (T830)

Specimen Type	Temperature	Time	Special Container
Plasma EDTA	Frozen	14 days	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
8060	Renin Activity, P	Numeric	ng/mL/h	2915-7

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

Supplemental Report:

No

CPT Code Information:

84244

Reference Values:

- 0-2 years: 4.6 ng/mL/h (mean)* Range: 1.4-7.8 ng/mL/h
3-5 years: 2.5 ng/mL/h (mean)* Range: 1.5-3.5 ng/mL/h

6-8 years: 1.4 ng/mL/h (mean)* Range: 0.8-2.0 ng/mL/h
9-11 years: 1.9 ng/mL/h (mean)* Range: 0.9-2.9 ng/mL/h
12-17 years: 1.8 ng/mL/h (mean)* Range: 1.2-2.4 ng/mL/h
Mean data not standardized as to time of day or diet. Infants were supine, children sitting.
*Stalker HP, Holland NH, Kotchen JM, Kotchen TA. Plasma renin activity in healthy children. J Pediatr.
1976;89(2):256-258

Na-depleted, upright (peripheral vein specimen)
18-39 years: 10.8 ng/mL/h (mean)
2.9-24.0 ng/mL/h (range)
> or =40 years: 5.9 ng/mL/h (mean)
2.9-10.8 ng/mL/h (range)

Na-replete, upright (peripheral vein specimen)
18-39 years: 1.9 ng/mL/h (mean)
< or =0.6-4.3 ng/mL/hour (range)
> or =40 years: 1.0 ng/mL/h (mean)
< or =0.6-3.0 ng/mL/h (range)