

**Reporting Title:** Cortisol, Free, Random, U**Performing Location:** Rochester**Ordering Guidance:**

The preferred screening test for Cushing syndrome is a measurement of free cortisol in a 24-hour urine collection by liquid chromatography tandem mass spectrometry (LC-MS/MS); order CORTU / Cortisol, Free, 24 Hour, Urine.

The optimal specimen type for evaluation of primary adrenal insufficiency and hypopituitarism is serum; order CORT / Cortisol, Serum.

**Specimen Requirements:**

Supplies: Urine tube, 10 mL (T068)

Collection Container/Tube: Clean, plastic urine container with no metal cap or glued insert

Submission Container/Tube: Plastic, 10-mL urine tube or clean, plastic aliquot container with no metal cap or glued insert

Specimen Volume: 10 mL

Collection Instructions: Collect a random urine specimen.

**Specimen Minimum Volume:**

4 mL

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	14 days	
	Frozen	28 days	
	Ambient	7 days	

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
10328	Cortisol/Creatinine Ratio	Alphanumeric	mcg/g Cr	11155-9
CRETR	Creatinine, Random, U	Numeric	mg/dL	2161-8

LOINC and CPT codes are provided by the performing laboratory.

**Supplemental Report:**

No

**Components:**

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
CRAN	Cortisol, Random, U			Yes	No
CRETR	Creatinine, Random, U			Yes	Yes (order RCTUR )

**CPT Code Information:**

82530

82570

**Reference Values:**

## Males

0-2 years: 3.0-120 mcg/g creatinine

3-8 years: 2.2-89 mcg/g creatinine

9-12 years: 1.4-56 mcg/g creatinine

13-17 years: 1.0-42 mcg/g creatinine

&gt; or =18 years: 1.0-119 mcg/g creatinine

## Females

0-2 years: 3.0-120 mcg/g creatinine

3-8 years: 2.2-89 mcg/g creatinine

9-12 years: 1.4-56 mcg/g creatinine

13-17 years: 1.0-42 mcg/g creatinine

&gt; or =18 years: 0.7-85 mcg/g creatinine

Use the conversion factors below to convert each analyte from mcg/g creatinine to nmol/mol creatinine.

## Conversion factor

Cortisol: mcg/g creatinine x 312=nmol/mol creatinine

Cortisol molecular weight=362.5

Creatinine molecular weight=113.12