

Cortisol and Cortisone, Saliva

Test ID: SALCC

Useful for:

Screening and diagnosis of Cushing syndrome/hypercortisolism

Methods:

Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)

Reference Values:

Cortisol:

Immediately after waking: 85-620 ng/dL

Immediately prior to going to bed: <127 ng/dL

Cortisone:

Immediately after waking: 510-2110 ng/dL

Immediately prior to going to bed: 62-624 ng/dL

Cortisol/Cortisone Ratio interpretation:

Cortisol should be lower than cortisone in saliva. A ratio greater than 1 suggests contamination with blood or exogenous cortisol. A ratio greater than 2 indicates contamination is likely. In these cases, recollection is recommended.

Specimen Requirements:

Supplies: Cortisol, Saliva Collection Kit (T514)

Container/Tube: Sarstedt Salivette

Specimen Volume: 1.5 mL

Collection Instructions:

1. Provide patient with a Saliva Collection Kit (Salivette) containing the [Cortisol and Cortisone - Saliva Collection Instructions](#) and ask them to follow the instructions as written.
2. If performing a late-night salivary cortisol (LNSC) test, specimen should be collected immediately prior to going to bed. If patient is undergoing assessment for adrenal insufficiency, specimen should be collected immediately after waking up. The patient should follow their normal sleeping schedule. Record collection time on the [Cortisol and Cortisone - Saliva Collection Instructions](#) sheet.

3. Instruct patient to return [Cortisol and Cortisone - Saliva Collection Instructions](#) with the appropriately labeled Salivette to the laboratory.

Additional Information: Reference intervals are available for LNSC testing (immediately before going to bed) and immediately after waking for assessment of adrenal insufficiency.

Minimum Volume: 0.6 mL

Specimen Stability Information:

Specimen Type	Temperature	Time
Saliva	Refrigerated (preferred)	28 days
	Ambient	14 days
	Frozen	60 days

Cautions:

Several factors may influence results:

- Stress, acute illness, psychiatric conditions, alcohol use, and certain medications can elevate levels
- Timing of collection is critical due to circadian variation
- Irregular sleep schedules (eg, shift work) may affect interpretation
- Topical hydrocortisone may falsely elevate salivary cortisol, whereas cortisone is less affected

CPT Code:

82530

82542

Day(s) Performed: Monday through Friday

Report Available: 3 to 6 days

Questions

Contact Joshua Yang, Laboratory Resource Coordinator at 800-533-1710.