MAYO CLINIC LABORATORIES

Test Definition: DEXA

Dexamethasone, Serum

Overview

Useful For

Confirming the presence of dexamethasone in serum

Confirming the cause of secondary adrenal insufficiency

This test is **not useful** as the sole basis for a diagnosis or treatment decisions.

Method Name

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

NY State Available

Yes

Specimen

Specimen Type

Serum

Ordering Guidance

To detect the metabolite of fluticasone or Flonase, order 17BFP / Fluticasone 17-Beta-Carboxylic Acid, Random, Urine.

For synthetic glucocorticoid analyte screen, order SGSS / Synthetic Glucocorticoid Screen, Serum.

Specimen Required

Collection Container/Tube:

Preferred: Red top

Acceptable: Serum gel

Submission Container/Tube: Plastic vial

Specimen Volume: 2 mL

Collection Instructions:

1. Draw blood between 7:30 a.m. and 9:00 a.m. the morning following an evening dose.
2. Centrifuge and aliquot serum into plastic vial within one hour of collection.

Specimen Minimum Volume

0.6 mL

Reject Due To

Gross hemolysis	OK
Gross lipemia	OK

Gross icterus	OK

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Frozen (preferred)	28 days	
	Refrigerated	7 days	
	Ambient	72 hours	

Clinical & Interpretive

Clinical Information

Synthetic glucocorticoids are widely used and have an important clinical utility both as antiinflammatory and immunosuppressive agents. The medical use of these agents, as well as their surreptitious use, can sometimes lead to a confusing clinical presentation. Patients exposed to these steroids may present with clinical features of Cushing syndrome but with suppressed cortisol levels and evidence of hypothalamus-pituitary-adrenal axis suppression.

Reference Values

Baseline: <30 ng/dL
8:00 a.m. following 1 mg Dexamethasone, previous evening: >100 ng/dL
8:00 a.m. following 8 mg Dexamethasone, (4 x 2 mg doses) previous day: >800 ng/dL

Interpretation

This test will screen for, and quantitate if present, the synthetic glucocorticoid, dexamethasone.

The presence of this synthetic glucocorticoid in serum indicates the current or recent use of this compound.

Cautions

Lack of detection does not preclude use of dexamethasone because adrenal suppression may persist for some time after the exogenous steroid is discontinued.

Clinical Reference

Genere N, Kaur RJ, Athimulam S, et al: Interpretation of abnormal dexamethasone suppression test is enhanced with use of synchronous free cortisol assessment. J Clin Endocrinol Metab. 2021 Oct 14;dgab724. doi: 10.1210/clinem/dgab724. Epub ahead of print

Performance

Method Description

Dexamethasone is extracted from serum and measured by liquid chromatography (high-resolution accurate-mass) mass spectrometry.(Unpublished Mayo method)

PDF Report
No

Day(s) Performed
Tuesday, Thursday

Report Available
2 to 5 days

Specimen Retention Time
3 months

Performing Laboratory Location
Rochester

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 Regional Manager. For assistance, contact Customer Service.

Test Classification
This test was developed, and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information
80299

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
DEXA	Dexamethasone, S	14062-4

Result ID	Test Result Name	Result LOINC® Value
609439	Dexamethasone, S	14062-4