



Pathology and Laboratory Medicine



Orderable - CORS/CORST

Turn Around Time: 4 hours

Specimen:

Adult	Pediatric
4.5 mL Light Green top	0-2 years: 0.5 mL Light Green top
(Li-Heparin) Vacutainer	(Li-Heparin) Microtainer
tube	2-10 years: 3 mL Light Green top
	(Li-Heparin) Vacutainer tube
Red, Gold, or Lavender (EDTA) top tubes are also acceptable	



Laboratory: Core Lab



Requisition:

GENERAL LABORATORY REQUISITION



Method of Analysis:

Roche

Electrochemiluminescence

Collection Information:

Minimum volume of plasma or serum required is 700 μ L for adult samples or 200 μ L for pediatric samples.

Reference Ranges:

Collection Time	Range
6 - 10 am:	133 – 537 nmol/L
4 - 8 pm:	68 – 327 nmol/L



Test Schedule: As required

Interpretive Comments:

Plasma cortisol levels are normally highest around 8 am and lowest around 12 am.

Comments:

Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.

Oral contraceptives, pregnancy, or estrogen therapy cause elevated plasma cortisol levels due to an increase in binding proteins.

Prednisolone, $6-\alpha$ -methylprednisolone, or prednisone treatment may cause falsely







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elevated cortisol results.

During metyrapon tests, 11-deoxycortisol levels are elevated. Falsely elevated cortisol values may be determined due to cross reactivity of the assay with 11-deoxycortisol.

Patients suffering from 21-hydroxylase deficiency exhibit elevated 21-deoxycortisol levels and this can cause falsely elevated cortisol results.