

ACTH
STIMULATION
TEST,
PLASMA/
SERUM

Orderable – See Collection Information

Turn Around Time: 4 hours for cortisol; 5 days for ACTH

Alternate Name(s):

Cosyntropin Test

Specimen:

FOR ACTH TESTING:

Adult	Pediatric
4 mL Lavender top (EDTA) Vacutainer tube	0-2 years: 0.5 mL Lavender top (EDTA) Microtainer 2-10 years: 2 mL Lavender top (EDTA) Vacutainer tube
Red, Gold, or Light Green (Li-heparin) top tubes are NOT acceptable.	

FOR CORTISOL TESTING:

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

FOR TESTING OF OTHER ANALYTES:

Please consult the Laboratory Test Information Guide entries for those analytes to determine the appropriate specimen type.

Collection Information:

Choose from (.ACTH0MST, .CORM30MST, .CORM15MST, .COR0MST, .COR15MST, .COR30MST, .COR45MST, .COR60MST, .COR75MST, .COR90MST, .COR105MST, .COR120MST, .COR180MST, .COR240MST, ACTHST) as appropriate and also include other analytes as appropriate.

FOR ACTH TESTING:



Laboratory:
Core Lab



Requisition:
GENERAL LABORATORY
REQUISITION



Method of Analysis:
Roche Electrochemi-
luminescence



Test Schedule:
For cortisol testing, as
required.

For ACTH testing,
Tuesday afternoons.



ACTH
STIMULATION
TEST,
PLASMA/
SERUM

Pre-chill Vacutainer, place on ice immediately after blood collection, and deliver to lab immediately.

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

FOR CORTISOL TESTING:

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

FOR TESTING OF OTHER ANALYTES:

Please consult the Laboratory Test Information Guide entries for those analytes to determine the appropriate collection information.

Reference Ranges:

Interpretation of this test is based on the clinical circumstances, other medications and the formulation of ACTH used for this stimulation challenge.

Special Processing:

FOR ACTH TESTING:

Use a refrigerated centrifuge to separate plasma. Analyze samples immediately or freeze them at -20 $^{\circ}$ C.

Comments:

Biotin may interfere with the cortisol and ACTH tests. 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.

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

Storage and Shipment:

FOR ACTH TESTING:

Store and ship plasma frozen.