



Laboratory Service Manual

Lab Dept: Chemistry

Test Name: ACTH

General Information

Lab Order Codes: ADCO

Synonyms: Adrenocorticotrophic Hormone (ACTH), Plasma; Corticotropin; Cushing's Disease

CPT Codes: 82024 – Adrenocorticotrophic hormone (ACTH)

Test Includes: ACTH level reported in pg/mL.

Logistics

Test Indications: Useful for determining the cause of hypercortisolism and hypocortisolism states.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (Test# 8411)

Phone Numbers:

Minneapolis: 612-813-6280

Saint Paul: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 3 days, test set up Monday - Saturday

Special Instructions: See [Collection](#)

Specimen

Specimen Type: Whole blood

Container: Lavender top (EDTA) tube (MUST be ice cooled)

Draw Volume: 3.0 mL blood

Processed Volume: 1.0 mL (Minimum: 0.5 mL) plasma



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Collection:	Morning (6 a.m. – 10 a.m.) specimens are desirable. Draw in an ice-cooled, lavender top (EDTA) tube
Special Processing:	Lab Staff: Centrifuge specimen in a refrigerated centrifuge, remove plasma aliquot as soon as possible from cells. Place plasma aliquot in a screw-capped round bottom plastic vial. Store and ship and frozen temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than EDTA plasma, warm specimens, mislabeled or unlabeled specimens

Interpretive

Reference Range:

Pediatrics:	Pediatric reference values are the same as adults, as confirmed by peer reviewed literature.
Adults:	10 – 60 pg/mL (a.m. draws)
No established reference values for p.m. draws	

Critical Values: N/A

Limitations: In very rare circumstances of the ectopic ACTH syndrome, the elevated ACTH may be biologically active but not detected by the immunometric assay.

Patients taking glucocorticoids may have suppressed levels of ACTH with an apparent high level of cortisol. This may be due to cross-reactivity with the cortisol immunoassays. If exogenous Cushing's is suspected, a cortisol level determined by high-performance liquid chromatography should be used with the ACTH level for the interpretation.

Methodology: Automated Chemiluminescent Immunometric Assay

Contraindications: N/A

References: [Mayo Medical Laboratories Web Page](#) (February 2010)