Lab Dept: Chemistry

Test Name: 17-OH PROGESTERONE, SERUM

General Information

Lab Order Codes: OHPG

Synonyms: Hydroxyprogesterone 17; Progesterone 17-OH; 17OHP

CPT Codes: 83498 – Hydroxyprogesterone, 17d

Test Includes: 17 OHP level reported in ng/dL.

Logistics

Test Indications: The analysis of 17-hydroxyprogesterone (17-OHPG) is 1 of the 3 analytes along with cortisol and androstendione, that constitutes the best screening test for congenital adrenal hyperplasia (CAH), caused by either 11- or 21-hyroxylase deficiency. Analysis for 17-OHPG is also useful as part of a battery of tests to evaluate females with hirsutism or infertility; both can result from adult onset CAH.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (Mayo test: OHPG)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 - 5 days, performed Monday - Friday

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Red NO GEL

Draw Volume: 1.8 mL (Minimum: 0.75 mL) blood

Processed Volume: 0.6 mL (Minimum: 0.25 mL) serum

Collection: Routine blood collection

Special Processing: Lab Staff: Centrifuge specimen. Remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refirgerated temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Gross hemolysis; gross lipemia; specimens collected in gel tubes; mislabeled or unlabeled specimens

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Interpretive

Reference Range:

Premature/preterm Infants:			
Preterm infants may exceed 630 ng/dL, however it is uncommon to see levels reach 1,000 ng/dL.			
Full Term Infants:			
0 – 28 days	<630 ng/dL Levels fall from newborn to prepubertal gradually within 6 months.		
Prepubertal Children:			
Males:	<110 ng/dL		
Females:	<100 ng/dL		
Puberty:	Male:	Female	
Adults:	Male:	Female:	
	<220 ng/dL	Follicular:	<80 ng/dL
		Luteal:	<285 ng/dL
		Postmenopausal:	<51 ng/dL

Critical Values: N/A

Limitations:	At birth the hypothalamic-pituitary-adrenal axis and the hypothalamic-pituitary-gonadal axis are activated and adrenal and sex steroid levels are high. In preterm infants the elevations can be even more pronounced due to illness and stress. As a result, preterm infants may occasionally have 17-hydroxyprogesterone levels of up to 1,000 ng/dL. Term infants (0-28 days) will have levels <630 ng/dL. These then fall over the following 1-6 months to prepubertal levels of <110 ng/dL (males) and <100 ng/dL (females).
Methodology:	Liquid Chromatography-Tandem mass spectrometry (LC-MS/MS)
References:	Mayo Clinic Laboratories (August 2021)
Updates:	9/29/2009: Updated method, reference values 5/5/2010: Updated CPT code. 5/25/2017: Update CPT code. 2/1/2018: Collection container update. 8/23/2021: Testing moved from Esoterix to Mayo.