

Reporting Title: Interference Eval, Heterophile, HCG
Performing Location: Mayo Clinic Laboratories - Rochester Superior Drive

Ordering Guidance:
If "HCG Total OB" or pregnancy is indicated, order THCG / Human Chorionic Gonadotropin (hCG), Quantitative, Pregnancy, Serum.

Specimen Requirements:
Patient Preparation: For 12 hours before specimen collection, patient **should not** take multivitamins or dietary supplements (eg, hair, skin, and nail supplements) containing biotin (vitamin B7).
Supplies: Sarstedt Aliquot Tube 5 mL (T914)
Collection Container/Tube:
Preferred: Serum gel
Acceptable: Red top
Submission Container/Tube: Plastic vial
Specimen Volume: 2.5 mL
Collection Instructions: Centrifuge and aliquot serum into a plastic vial.

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	7 days	
	Ambient	7 days	
	Frozen	90 days	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
HCGQN	Beta-HCG, Quantitative, S	Numeric	IU/L	21198-7
HCGAM	HCG, Alternative Method, S	Numeric	IU/L	21198-7
HCGIF	HCG, Interference Heterophile	Alphanumeric		99307-1
HCGIN	HCG, Interpretation	Alphanumeric		77202-0

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:
No

Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
HCGII	HCG, Interference Interpretation			Yes	No
HCGQN	Beta-HCG, Quantitative, S	1	84702	Yes	Yes, (order BHCG)
HCGAM	HCG, Alternative Method, S	1	84702	Yes	No

CPT Code Information:

84702 x 2

Reference Values:

BETA-HUMAN CHORIONIC GONADOTROPIN, QUANTITATIVE, SERUM

Children(1,2)

Males

Birth-3 months: < or =50 IU/L*

>3 months-<18 years: <1.4 IU/L

Females

Birth-3 months: < or =50 IU/L*

>3 months-<18 years: <1.0 IU/L

Pediatric reference values based on:

1. Chen RJ, Huang SC, Chow SN, Hsieh CY. Human chorionic gonadotropin pattern in maternal circulation. Amniotic fluid and fetal circulation in late pregnancy. J Reprod Med. 1993;38(2):151-154

2. Schneider DT, Calaminus G, Gobel U. Diagnostic value of alpha 1-fetoprotein and beta-human chorionic gonadotropin in infancy and childhood. Pediatr Hematol Oncol. 2001;18(1):11-26

*Human chorionic gonadotropin (hCG), produced in the placenta, partially passes the placental barrier. Newborn serum beta-hCG concentrations are approximately 1/400th of the corresponding maternal serum concentrations, resulting in neonate beta-hCG levels of 10-50 IU/L at birth. Clearance half-life is approximately 2 to 3 days. Therefore, by 3 months of age, levels comparable to adults should be reached.

Adults (97.5th percentile)

Males: <1.4 IU/L

Females

Premenopausal, nonpregnant: <1.0 IU/L

Postmenopausal: <7.0 IU/L

HUMAN CHORIONIC GONADOTROPIN, ALTERNATIVE METHOD

Males

Birth-3 months: Not established

>3 months-49 years: <0.6 IU/L

50 years-80 years: <1.6 IU/L

>80 years: Not established

Females

Birth-3 months: Not established

>3 months-40 years: <0.6 IU/L

41 years-50 years: <6.2 IU/L

51 years-150 years: <7.8 IU/L