



# Test Definition: IEHCG

Interference Evaluation Heterophile,  
Beta-Human Chorionic Gonadotropin, Serum

**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: &lt; or =50 IU/L\*

&gt;3 months-&lt;18 years: &lt;1.4 IU/L

Females

Birth-3 months: &lt; or =50 IU/L\*

&gt;3 months-&lt;18 years: &lt;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: &lt;1.4 IU/L

Females

Premenopausal, nonpregnant: &lt;1.0 IU/L

Postmenopausal: &lt;7.0 IU/L

HUMAN CHORIONIC GONADOTROPIN, ALTERNATIVE METHOD

Males

Birth-3 months: Not established

&gt;3 months-49 years: &lt;0.6 IU/L

50 years-80 years: &lt;1.6 IU/L

&gt;80 years: Not established

Females

Birth-3 months: Not established

&gt;3 months-40 years: &lt;0.6 IU/L

41 years-50 years: &lt;6.2 IU/L

51 years-150 years: &lt;7.8 IU/L