

**HUMAN CHORIONIC GONADOTROPIN, BETA-SUBUNIT
(QUANTITATIVE), SERUM, HIGH SENSITIVITY
#60443**

USEFUL FOR:

- Monitoring patients for retained products of conception.
- Aid in the diagnosis of gestational trophoblastic disease, testicular tumors, ovarian germ cell tumors, teratomas, and, rarely, other hCG-secreting tumors.
- Serial measurement of hCG following treatment to:
 - Monitor therapeutic response in gestational trophoblastic disease or in hCG-secreting tumors.
 - Detect persistent or recurrent gestational trophoblastic disease or hCG-secreting tumors.

METHODOLOGY: Immunoenzymatic Assay**REFERENCE VALUES:**

Children (males and females)(1,2)

Term infants (> or =36 weeks gestation) - < or =3 months: < or =50.0 IU/L

>3 months - < or =18 years: Males: <0.9 IU/L Females: <2.4 IU/L

hCG, produced in the placenta, partially passes the placental barrier. The 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 2-3 days. Therefore, by 3 months of age, levels comparable to adults should be reached.

Adults (97.5 percentile)

Males: <0.9 IU/L

Females: Premenopausal, nonpregnant: <2.4 IU/L Postmenopausal: <7.4 IU/L

NOTE: Pediatric reference values based on:

1. Chen RJ, Huang SC, Chow SN, et al: Human chorionic gonadotropin pattern in maternal circulation. Amniotic fluid and fetal circulation in late pregnancy. J Reprod Med 1993;38:151-154
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;18:11-26

SPECIMEN REQUIREMENTS: Container/Tube: Plain, red-top tube(s) or serum gel tube(s)**Specimen Volume:** 0.6 mL of serum**LIST FEE:** \$111.40**CPT CODE:** 84702**ANALYTIC TIME:** Same day/1 day**DAY(S) SET UP:** Monday through Friday 5 a.m.-12 a.m., Saturday 6 a.m.-6 p.m.

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager
Greg Renkly, Mayo Medical Laboratories' Technologist Support
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