

# CGB/HCG-Beta Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13036B

## **Product Information**

WB, IHC-P, E <u>P0dn86</u> <u>Q6NT52</u> , <u>NP_149133.1</u> Human Rabbit Polyclonal Rabbit IgG RB32849
17739 137-165

#### **Additional Information**

Gene ID	1082;93659;94115
Other Names	Choriogonadotropin subunit beta, CG-beta, Chorionic gonadotrophin chain beta, CGB, CGB3
Target/Specificity	This CGB/HCG-Beta antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 137-165 amino acids from the C-terminal region of human CGB/HCG-Beta.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CGB/HCG-Beta Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	CGB3
Synonyms	CGB
Function	Beta subunit of the human chorionic gonadotropin (hCG). hCG is a complex

	glycoprotein composed of two glycosylated subunits alpha and beta which are non-covalently associated. The alpha subunit is identical to those in the pituitary gonadotropin hormones (LH, FSH and TSH). The beta subunits are distinct in each of the hormones and confer receptor and biological specificity. Has an essential role in pregnancy and maternal adaptation. Stimulates the ovaries to synthesize the steroids that are essential for the maintenance of pregnancy.
Cellular Location	Secreted.
Tissue Location	High expression in the placenta throughout pregnancy.

### Background

This gene is a member of the glycoprotein hormone beta chain family and encodes the beta 3 subunit of chorionic gonadotropin (CG). Glycoprotein hormones are heterodimers consisting of a common alpha subunit and an unique beta subunit which confers biological specificity. CG is produced by the trophoblastic cells of the placenta and stimulates the ovaries to synthesize the steroids that are essential for the maintenance of pregnancy. The beta subunit of CG is encoded by 6 genes which are arranged in tandem and inverted pairs on chromosome 19q13.3 and contiguous with the luteinizing hormone beta subunit gene.

#### References

Cole, L.A. Placenta 31(8):653-664(2010) Ra, Y.J., et al. Interact Cardiovasc Thorac Surg 11(1):114-116(2010) Verma, B., et al. J. Immunol. 184(4):2156-2165(2010) Handschuh, K., et al. Placenta 30(12):1016-1022(2009) Reisenbichler, E.S., et al. Breast J 15(5):527-530(2009)

#### Images



All lanes : Anti-CGB/HCG-Beta Antibody (C-term)at 1:1000 dilution Lane 1:Human placenta lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size :34kDa Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes : Anti-CGB/HCG-Beta Antibody (C-term)at 1:1000 dilution Lane 1:Human placenta lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size :34kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## Citations

- Generating Functional Multicellular Organoids from Human Placenta Villi
- β-hCG promotes epithelial ovarian cancer metastasis through ERK/MMP2 signaling pathway.
  Human chorionic gonadotropin β regulates epithelial-mesenchymal transition and metastasis in human ovarian <u>cancer.</u>

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.