

**Mouse Anti-Human Chorionic Gonadotropin (HCG) beta [HCGb/54]: MC0797, MC0797RTU7**

**Intended Use:** For Research Use Only

**Description:** This antibody reacts with a protein of 22kDa, identified as  $\beta$  sub-unit of HCG. It does not cross react with the  $\alpha$  sub-unit. HCG is a glycoprotein, which is secreted in large quantities by normal trophoblasts. It is present only in trace amounts in non-pregnant urine and sera but rises sharply during pregnancy. HCG is composed of two non-identical, non-covalently linked polypeptide chains designated as the alpha and beta subunits. The beta subunit is identical to that of thyroid stimulating hormone (TSH), follicle stimulating hormone (FSH), and luteinizing hormone (LH). hCG antibody detects cells and tumors of trophoblastic origin such as choriocarcinoma. Large cell carcinoma and adenocarcinoma of the lung demonstrate anti-hCG positivity in 90% and 60% of cases respectively. 20% of lung squamous cell carcinomas are positive. hCG expression by non-trophoblastic tumors may indicate aggressive behavior.

**Specifications:**

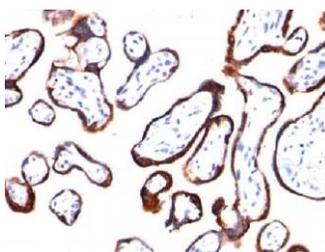
Clone: HCGb/54  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human  
 Localization: Cytoplasm, secreted  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, WB  
 Package:

Description	Catalog No.	Size
Human Chorionic Gonadotropin (HCG) beta Concentrated	MC0797	1 ml
Human Chorionic Gonadotropin (HCG) beta Prediluted	MC0797RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: JAR or TT Cells. Placenta  
 Concentrated Dilution: 50-200  
 Pretreatment: Citrate pH6.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 min @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human placenta stained with anti-HCG beta using DAB

**References**

1. Specific detection of type II human chorionic gonadotropin beta subunit produced by trophoblastic and neoplastic cells. Aldaz-Carroll L, et al. Clin Chim Acta. Apr 15;444:92-100, 2015.
2. Beta-human chorionic gonadotropin expression in recurrent and metastatic giant cell tumors of bone: a potential mimicker of germ cell tumor. Lawless ME, et al. Int J Surg Pathol. Oct;22(7):617-22, 2014.
3. Prognostic significance of  $\beta$ -human chorionic gonadotropin and PAX8 expression in anaplastic thyroid carcinoma. Becker N, et al. Thyroid. Feb;24(2):319-26, 2014.

Doc. 100-MC0797  
Rev. A