



## Product Information Sheet

### Monoclonal Anti-Human Chorionic gonadotropin ( $\beta$ -subunit), $\beta$ -HCG

**Catalogue No.** MA1111

**Immunogen**

Purified human Chorionic Gonadotropin.

**Lot No.** 11110Y1188

**Purification**

Purified by Protein A affinity chromatography.

**Clone:** HCG-8

**Application**

*Immunohistochemistry(P)*

**Ig type:** mouse IgG1

At 2 $\mu$ g/ml to detect  $\beta$ HCG in formalin fixed and paraffin embedded tissues.

**Size:** 100 $\mu$ g/vial

*Other applications have not been tested.*

*Optimal dilutions should be determined by end user.*

**Specificity**

Human.

No cross reactivity with other

Proteins (hLH, hTSH, or hFSH).

**Formulation**

Lyophilized from 1.2% sodium acetate, with 2mg BSA and 0.01mg NaN<sub>3</sub> as preservative.

**Reconstitution**

Neutral PBS or distilled water. If 1ml of PBS is used, the antibody concentration will be 100 $\mu$ g/ml.

**Recommended application**

*Immunohistochemistry(P)*

**To reorder contact us at:**

**Antagene, Inc.**

**Toll Free: 1(866)964-2589**

**email: Info@antageneinc.com**

**Storage**

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

### BACKGROUND

$\beta$ -HCG ( $\beta$ -Human Chorionic Gonadotropin), also termed as Chorionic Gonadotropin, Beta Chain (CGB). It is encoded by a multigene cluster composed of six homologous sequences. And in the family of beta-containing glycoprotein hormones,  $\beta$ -HCG is unique in that it contains an extension of 29 amino acids at its COOH end.  $\beta$ -HCG is mapped to 19q13.32 and expressed in trophoblast and various malignant tumors promotes cellular motility in vivo.  $\beta$ -HCG has a novel function in uterine adaptation to early pregnancy as well as in tumor development and underline the importance of HCG as an as yet unrecognized angiogenic factor.

### REFERENCE

1. Bo, M.; Boime, I. : Identification of the transcriptionally active genes of the chorionic gonadotropin beta gene cluster in vivo. *J. Biol. Chem.* 267: 3179-3184, 1992.)
2. Policastro, P.; Ovitt, C. E.; Hoshina, M.; Fukuoka, H.; Boothby, M. R.; Biome, I. : The beta-subunit of human chorionic gonadotropin is encoded by multiple genes. *J. Biol. Chem.* 258: 11492-11499, 1983.
3. Zygmunt, M.; Herr, F.; Keller-Schoenwetter, S.; Kunzi-Rapp, K.; Munstedt, K.; Rao, C. V.; Lang, U.; Preissner, K. T. : Characterization of human chorionic gonadotropin as a novel angiogenic factor. *J. Clin. Endocr. Metab.* 87: 5290-5296, 2002.

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