



## BMA BIOMEDICALS

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### Monoclonal Antibody To Human beta-HCG Human Chorionic Gonadotropin

Monoclonal antibody h 6 recognizes  $\beta$ -HCG, a well-defined oncofetal protein of 36.7 kDa m.w. associated with pregnancy and some cancers. Raised serum levels for HCG are found in teratogenic carcinomas and trophoblastic tumors and occasionally in gastrointestinal, urogenital, bronchial or mammary carcinomas, and in lymphomas.

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#### TECHNICAL AND ANALYTICAL CHARACTERISTICS

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| <b>Product Number:</b>        | T-1322 (Lot 02PO1204)                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Clone:</b>                 | h 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Host species, isotype:</b> | Mouse IgG1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Quantity:</b>              | 200 $\mu$ g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Format:</b>                | Affinity purified, lyophilized.<br><br>Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA), and 0.01% (v/v) Kathon™ CG as a preservative.                                                                                                                                                                                                                                         |
| <b>Stability:</b>             | Original vial: 1 year at 4° - 8°C from date of purchase.<br>Stock solution and aliquots thereof: 1 year at -20°C.<br>Avoid freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications:</b>          | Tested for immunohistochemistry (IHC).<br><b>Approximate working dilution for IHC:</b><br>Frozen sections: does not react on routinely processed frozen sections.<br>Paraffin sections: 2 $\mu$ g/ml (1:200); pretreatment with Proteinase K for antigen retrieval is recommended<br><br>Optimal dilutions should be determined by the end user<br>Suggested positive control: Human placenta<br><br>Please see <a href="http://www.bma.ch">www.bma.ch</a> for protocols and general information |
| <b>Protein database:</b>      | <u><a href="#">human-P0DN86</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Antigen, epitope:**

Human gonadotropin is a glycoprotein of 36.7kDa consisting of two subunits. The  $\alpha$ -chain (MW 14.5 kD) is common to three other glycoprotein hormones (TSH, FSH, LH) whereas the  $\beta$ -chain (22.2kD) is more different. The  $\beta$ -chain of HCG and LH (lutrophin) have sequence homology in the first 112 amino acids and differ at the C-terminal end consisting of 24 amino acids.

**Selected references**

- Birken, S., Chemistry of human choriogonadotrophin. Ann Endocrinol (Paris) 45:297-305 (1984)
- Carreiro-Lewandowski, E., Pregnancy testing: detection of human chorionic gonadotrophin (HCG). J Med Technol 3: 437-476 (1986)
- Lange, P.H., Testicular tumor markers. Lab Manag 18:27-32 (1980)
- Rinker, A.D., W. Tietze,  $\beta$ -HCG vs intact hCG assays in the detection of trophoblastic diseases. Clin Chem 35: 1799-1800 (1989)
- Gaspard, U.J., A.M. Reuter, J.-L. Deville, Y. Vrindts-Gevaert, K.D. Bagshawe, P. Franchimont. Serum concentration of human chorionic gonadotrophin and its alpha and beta subunits. 2. Trophoblastic tumors. Clin Endocrin 13: 319-329 (1980)
- Stähli, C., V. Miggiano, J. Stocker, Th. Staehelin, P. Häring, B. Takacs. Distinction of epitopes by monoclonal antibodies. Methods Enzymol 92: 242-253 (1983).

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For in vitro research only. This product contains Kathon™ CG as a preservative.