

Human Chorionic Gonadotropin (Beta)

Concentrated and Prediluted Polyclonal Antibody

Control Number: 902-124-082817

Catalog Number:	ACR 124 A	APR 124 AA
Description:	0.1 ml, concentrated	6.0 ml, prediluted
Dilution:	1:200-1:400	Ready-to-use
Diluent:	Da Vinci Green	N/A

Intended Use:

For Research Use Only. Not for use in diagnostic procedures.

Summary and Explanation:

Studies have shown the Human Chorionic Gonadotropin (hCG) antibody reacts with a protein that is secreted by normal trophoblasts in normal placenta and in neoplastic trophoblasts of choriocarcinomas and teratomas. It has also been shown to react with lung cancer, urinary bladder, ovarian mixed germ-cell tumors, adenocarcinoma of the prostate, seminomas and pituitary adenomas (2-5).

Principle of Procedure:

Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labeling the antigen with a primary antibody, an enzyme labeled polymer is added to bind to the primary antibody. The detection of the bound antibody is evidenced by a colorimetric reaction.

Source: Rabbit polyclonal

Species Reactivity: Human; others not tested

Clone: N/A

Isotype: N/A

Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig concentration.

Epitope/Antigen: hGC protein

Cellular Localization: Cytoplasmic

Positive Control: Placenta

Known Applications:

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As: Buffer with protein carrier and preservative

Storage and Stability:

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Staining Protocol Recommendations:

Peroxide Block: Block for 5 minutes with Biocare's Peroxidized I.

Pretreatment Solution (recommended): Reveal

Pretreatment Protocol:

Heat Retrieval Method:

Retrieve sections under pressure using Biocare's Decloaking Chamber, followed by a wash in distilled water; alternatively, steam tissue sections for 45-60 minutes. Allow solution to cool for 10 minutes then wash in distilled water.

Protein Block (Optional): Incubate for 5-10 minutes at RT with Biocare's Background Punisher.

Primary Antibody: Incubate for 30 minutes at RT.

Probe: N/A

Polymer: Incubate for 30 minutes at RT with a secondary-conjugated polymer.

Staining Protocol Recommendations Cont'd:

Chromogen: Incubate for 5 minutes at RT with Biocare's DAB - OR - Incubate for 5-7 minutes at RT with Biocare's Warp Red.

Counterstain: Counterstain with hematoxylin. Rinse with deionized water. Apply Tacha's Bluing Solution for 1 minute. Rinse with deionized water.

Technical Note:

This antibody has been standardized with Biocare's MACH 2 detection system. It can also be used on an automated staining system and with other Biocare polymer detection kits. Use TBS buffer for washing steps.

Limitations:

This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may vary and it is the responsibility of the end user to determine the appropriate application for its use.

Precautions:

1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN₃) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976) (6)
2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water. (7)
3. Microbial contamination of reagents may result in an increase in nonspecific staining.
4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
5. Do not use reagent after the expiration date printed on the vial.
6. The MSDS is available upon request and is located at <http://biocare.net/support/msds/>.

Technical Support:

Contact Biocare's Technical Support at 1-800-542-2002 for questions regarding this product.

References:

1. Weissbach L, Bussar-Maatz R, Mann K. The value of tumor markers in testicular seminomas. Results of a prospective multicenter study. *Eur Urol.* 1997;32(1):16-22.
2. Sheaff MT, *et al.* beta hCG as a prognostic marker in adenocarcinoma of the prostate. *J Clin Pathol.* 1996 Apr;49(4):329-32.
3. Matias-Guiu X, Prat J. Ovarian tumors with functioning stroma. An immunohistochemical study of 100 cases with human chorionic gonadotropin monoclonal and polyclonal antibodies. *Cancer.* 1990 May 1;65(9):2001-5.
4. Niehans GA, *et al.* Immunohistochemistry of germ cell and trophoblastic neoplasms. *Cancer* 1988 Sep 15;62 (6):1113-23.
5. Heshmati HM, *et al.* The immunocytochemical heterogeneity of silent pituitary adenomas. *Acta Endocrinol (Copenh).* 1988 Aug;118(4):533-7.
6. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
7. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory workers from occupationally Acquired Infections; Approved guideline-Third Edition CLSI document M29-A3 Wayne, PA 2005.