

Chromogranin A

Concentrated and Prediluted Cocktail Antibody
902-010-062917

BIOCARE
M E D I C A L

Catalog Number:	ACR 010 A, B, C	APR 010 AA
Description:	0.1, 0.5, 1.0 ml, concentrated	6.0 ml, prediluted
Dilution:	1:100	Ready-to-use
Diluent:	Da Vinci Green	

Intended Use:

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

Summary and Explanation:

This antibody recognizes a protein of 68-75 kDa, identified as Chromogranin A (a protein of 439-amino acid which is encoded on chromosome 14). Although the epitopes for [LK2H10] and [PHE5] are not precisely mapped, experimental data suggests that they are different. A cocktail of LK2H10 and PHE5 is specifically designed for sensitive detection of Chromogranin A in formalin-fixed, paraffin-embedded tissues. Chromogranin A is present in neuroendocrine cells throughout the body, including the neuroendocrine cells of the large and small intestine, adrenal medulla and pancreatic islets. It is an excellent marker for carcinoid tumors, pheochromocytomas, paragangliomas and other neuroendocrine tumors. Coexpression of Chromogranin A and neuron specific enolase (NSE) is common in neuroendocrine neoplasms.

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. A secondary antibody may be applied to bind the primary antibody, followed by an enzyme labeled polymer; or an enzyme labeled polymer may be applied directly to bind the primary antibody. The detection of the bound primary antibody is evidenced by an enzyme-mediated colorimetric reaction.

Source: Mouse monoclonal

Species Reactivity: Human; others not tested

Clone: LK2H10 + PHE5

Isotype: IgG1 + IgG1

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

Epitope/Antigen: Chromogranin A

Cellular Localization: Finely granular cytoplasm

Positive Control: Pancreas or adrenal gland

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 1.

Pretreatment: Perform heat retrieval using Biocare's Reveal Decloaker. Refer to the Reveal Decloaker product data sheet for specific instructions.

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

Primary Antibody: Incubate for 30 minutes at RT.

Probe: Incubate for 10 minutes at RT with a secondary probe.

Polymer: Incubate for 10-20 minutes at RT with a tertiary polymer.

Chromogen:

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

Staining Protocol Recommendations Cont'd:

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 4 detection system. Use TBS 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) (7)

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. (8)

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 SDS is available upon request and is located at <http://biocare.net>.

Technical Support:

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

References:

1. Barthez PY, *et al.* Pheochromocytoma in dogs: 61 cases (1984-1995). *J Vet Intern Med.* 1997 Sept-Oct; 11(5):272-8.

2. Terada T, *et al.* Endocrine cells in intraductal papillary-mucinous neoplasms of the pancreas. A histochemical and immunohistochemical study. *Virchows Arch.* 1997 Jul;431(1):31-6.

3. Declich P, *et al.* What type of chromogranin does PHE5 monoclonal antibody react with? *Virchows Arch.* 1997 Jun;430(6):509-10.

4. Burke AP, *et al.* Carcinoids of the jejunum and ileum: an immunohistochemical and clinicopathologic study of 167 cases. *Cancer.* 1997 Mar 15;79(6):1086-93.

5. Angelsen A, *et al.* Neuroendocrine differentiation in carcinomas of the prostate: do neuroendocrine serum markers reflect immunohistochemical findings? *Prostate.* 1997 Jan 1;30(1):1-6.



60 Berry Drive

Pacheco, CA 94553

USA

Rev: 062117

Tel: 800-799-9499 | www.biocare.net | Fax: 925-603-8080

Chromogranin A

Concentrated and Prediluted Cocktail Antibody
902-010-062917

BIOCARE
M E D I C A L

6. Meng Y, Li W, Yu J. A pathological study on phenotype differentiation and its significance in pulmonary large cell carcinoma. Zhonghua Bing Li Xue Za Zhi. 1996 Dec;25(6):347-50.

References Cont'd:

7. 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."

8. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.



60 Berry Drive
Pacheco, CA 94553
USA

Rev: 062117

Tel: 800-799-9499 | www.biocare.net | Fax: 925-603-8080