**Catalog Number:** ACR 058 A,B,C

**Description:** 0.1, 0.5, 1.0 ml, concentrated

**Dilution:** 1:100-1:200

**Diluent:** Da Vinci Green

**Intended Use:**
For Research Use Only. Not for use in diagnostic procedures

**Summary and Explanation:**
The CEA gene family belongs to the immunoglobulin gene superfamily (IgSF) and comprises a large number of genes. The cell surface associated CEA proteins are heavily glycosylated, abundantly expressed and multifunctional. The CEA (CD66e) COL-1 clone shows no detectable reactivity for other CEA family members such as NCA or BGP. COL-1 is useful in detecting early foci of gastric carcinoma and distinguishing pulmonary adenocarcinomas from mesothelioma. It stains many types of adenocarcinoma, but does not stain benign glands, stroma, or malignant prostatic cells. Normal colon, without colon disease, is unreactive, but a weak reactivity was in normal-appearing mucosa several centimeters remote from colon cancer. Key Reference: Shi ZR, Tacha D, Itzkowitz  

**Source:** Mouse monoclonal

**Species Reactivity:** Human; others not tested

**Clone:** COL-1

**Isotype:** IgG2a/kappa

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

**Epitope/Antigen:** CEA

**Cellular Localization:** Cytoplasmic and lumenal membrane

**Positive Control:** Colon carcinoma

**Normal Tissue:** Small intestine and stomach

**Abnormal Tissue:** Colon cancer, Pancreatic adenocarcinoma

**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.

**Protocol Recommendations:**

**Peroxide Block:**
Block for 5 minutes with Biocare's Peroxidazed 1.

**Pretreatment Solution:** N/A

**Pretreatment Protocol:** N/A

**Protein Block:**
Optional: Incubate for 10-15 minutes at RT with Biocare's Background Sniper.

**Primary Antibody:** Incubate for 30 minutes at RT

**Probe:** Incubate for 10 minutes at RT with a Probe.

**Polymer:** Incubate for 10 minutes at RT with a Polymer.

**Chromogen:**
Incubate for 5 minutes at RT when using Biocare's DAB. - OR - Incubate for 10-20 minutes at RT when using Biocare's Vulcan Fast Red.

**Counterstain:**
Counterstain with Hamatoxylin. 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. It can also be used on an automated staining system and with other BIOCARE polymer detection kits. Use TBS buffer for washing steps.

**Performance Characteristics:**
The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to: fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Biocare products. Ultimately, it is the responsibility of the investigator to determine optimal conditions. These products are tools that can be used for interpretation of morphological findings in conjunction with other diagnostic tests and pertinent clinical data by a qualified pathologist.

**Quality Control:**
Refer to NCCLS Quality Assurance for Immunocytochemistry approved guidelines, December 1999 MM4-A Vol.19 No.26 for more information about Tissue Controls.

**Precautions:**
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)

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. Microbial contamination of reagents may result in an increase in nonspecific staining. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change. The MSDS is available upon request.

**Troubleshooting:**
Follow the antibody specific protocol recommendations according to data sheet provided. If atypical results occur, contact BIOCARE's Technical Support at 1-800-542-2002.

**Limitations and Warranty:**
There are no warranties, expressed or implied, which extend beyond this description. BIOCARE is not liable for property damage, personal injury, or economic loss caused by this product.

**References:**
References cont'd:

