

CEA (polyclonal)

For In Vitro Diagnostic Use (IVD)

English: Instructions For Use

Presentation

Anti-CEA is a rabbit polyclonal antibody, diluted in tris buffered saline, pH 7.3-7.7, with protein base, and preserved with sodium azide.

Applications

Anti-CEA specifies a group of proteins in the Carcinoembryonic Antigen (CEA) family of proteins which are present in the epithelia of various types and tumors (both benign and malignant) derived from such epithelia. Such tissues are represented by the epithelia of colon, bronchus, alveoli, breast, pancreas, biliary tract, superficial layer and parietal layers of the stomach. Predominately biliary canaliculi are labeled in the liver and this factor is useful in the diagnosis of hepatocellular carcinoma. Anti-CEA has been quite useful in differentiating adenocarcinoma of the lung vs. mesothelioma.

Related products: Cytokeratin 5 & 6, Calretinin, WT-1, E-Cadherin, TTF-1, TAG-72, EMA, Cytokeratin 20

Reactivity	Paraffin, frozen
Control	Colon, lung, stomach, breast, associated adenocarcinomas
Visualization	Cytoplasmic
Stability	Up to 36 months; store at 2-8°C

Antibody color does not affect performance

Description	Cat. No.	Dilution/Comments
0.1 ml, concentrate	236A-14	1:200 - 1:500*
0.5 ml, concentrate	236A-15	1:200 - 1:500*
1 ml, concentrate	236A-16	1:200 - 1:500*
1 ml, prediluted	236A-17	Ready to use
7 ml, prediluted	236A-18	Ready to use
Positive control slides	236S	5 slides/pack

- P prediluted
C concentrate

Preparation and Pretreatment

1. Cut 3-4 µm section of formalin-fixed paraffin-embedded tissue and place on positively charged slides; dry overnight at 58°C.
2. Deparaffinize, rehydrate, and epitope retrieve; the preferred method is the use of Heat Induced Epitope Retrieval (HIER) techniques using Cell Marque's Trilogy™ in conjunction with a pressure cooker. The preferred method allows for simultaneous deparaffinization, rehydration, and epitope retrieval. Upon completion, rinse with 5 changes of distilled or deionized water.
3. If using HRP detection system, place slides in peroxide block for 10 minutes; rinse. If using AP detection system, omit this step.

Recommended Protocol for Staining at Room Temperature Using CytoScan™ BSA Detection System

1. Apply the antibody and incubate for 30 - 60 minutes; rinse.
2. Apply the link and incubate for 10 minutes; rinse.
3. Apply the label and incubate for 10 minutes; rinse.
4. Apply ample amount of chromogen and incubate for 1 - 10 minutes; rinse.
5. Dehydrate and coverslip.

Recommended Protocol for Staining at Room Temperature Using PolyScan™ Polymer Detection System

1. Apply the antibody and incubate for 30 - 60 minutes; rinse.
2. Apply the PolyScan™ Polymer Rabbit/Mouse Detection System for 30 minutes; rinse.
3. Apply ample amount of chromogen and incubate for 1 - 10 minutes; rinse.
4. Dehydrate and coverslip.

References

1. Sheahan K, O'Brien MJ et al. Differential reactivities of carcinoembryonic antigen (CEA) and CEA-related monoclonal and polyclonal antibodies in common epithelial malignancies. Am J Clin Pathol 1990;94:157-64.
2. Morrison C, Marsh W, Frankel WL. A comparison of CD10 to pCEA, MOC-31, and hepatocyte for the distinction of malignant tumors in the liver. Mod Pathol 2002;15:1279-87.
3. Alkushi A, Irving J, Hsu F, Dupuis B, Liu CL, Rijn M, et al. Immunoprofile of cervical and endometrial adenocarcinomas using a tissue array. Virchows Arch 2003;442:271-7
4. Shield PW, Perkins G, Wright RG. Immunocytochemical staining of cytologic specimens. How helpful is it? Am J Clin Pathol 1996;105: 157-62
5. Sanders DSA, Evans AT, Allen CA, Bryant FJ, Johnson GD, Hopkins J, et al. Classification of CEA-related positivity in primary and metastatic malignant melanoma. J Pathol 1994;172: 343-8

*The dilutions set forth above are estimates; actual results may differ because of variability in methods and protocols. Validation of antibody performance/protocol is the responsibility of the end user.