

CDX2 [BC39]

Format	Catalog No.	Pack size	Dilution
Concentrated	GB3184A,C	0.1, 1.0 mL	1:100
Prediluted	GB3184AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

CDX2 is a homeobox gene that encodes a transcription factor specific to the gut and is expressed in the nucleus of intestinal epithelial cells, from the duodenum to the rectum. The CDX2 protein is present in both primary and metastatic colorectal carcinomas. It has also been recognized in primary ovarian mucinous tumors and metastatic mucinous carcinomas affecting the ovary. Research indicates that the CDX2 marker has more specificity and sensitivity than CK20. In-house experiments indicate that CDX2 [BC39] demonstrated comparable or enhanced sensitivity relative to clone CDX2-88, while maintaining nearly equivalent specificity.

INTENDED USE -

Intended for In Vitro Diagnostic Applications CDX2 [BC39] is a mouse monoclonal antibody designed for laboratory application in the qualitative detection of CDX2 protein using immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence must be supplemented by morphological studies utilizing appropriate controls and assessed in conjunction with the patient's clinical history and other diagnostic tests by a skilled pathologist.

SUMMARY AND EXPLANATION -

CDX2 is a homeobox gene that encodes a transcription factor specific to the gut and is expressed in the nucleus of intestinal epithelial cells, spanning from the duodenum to the rectum. The CDX2 protein is present in both primary and metastatic colorectal carcinomas. It has also been recognized in primary ovarian mucinous tumors and metastatic mucinous carcinomas affecting the ovary. Research indicates that the CDX2 marker exhibits greater specificity and sensitivity in comparison to CK20. In-house experiments indicate that CDX2 [BC39] shown comparable or enhanced sensitivity relative to clone CDX2-88, while maintaining almost equivalent specificity.

PRINCIPLE OF PROCEDURE -

Antigen detection in tissues and cells is a multi-step immunohistochemistry procedure. The first step attaches the primary antibody to its designated epitope. A secondary antibody may be utilized to bind the primary antibody, followed by the application of an enzyme-labeled polymer; alternatively, an enzyme-labeled polymer may be administered immediately to bind the primary antibody. The identification of the bound primary antibody is demonstrated by an enzyme-catalyzed colorimetric reaction.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE - BC39

ISOTYPE - IgG1/kappa

PROTEIN CONCENTRATION - ~10 mg/ml. Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - CDX2

IMMUNOGEN- Human CDX2 recombinant protein (aa106-305)

CELLULAR LOCALISATION - Nuclear

POSITIVE TISSUE CONTROL - Colon cancer

KNOWN APPLICATIONS- Immunohistochemistry
30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

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

Materials required but not provided -

- 1) Positive tissue control - Colon cancer
- 2) Negative control tissue (internal or external)

- 3) Microscope slides and coverslips
- 4) Staining jars or baths
- 5) Timer
- 6) Xylene or xylene substitute
- 7) Ethanol or reagent alcohol
- 8) Deionized or distilled water
- 9) Heating equipment or enzyme for tissue pretreatment step
- 10) Detection system
- 11) Chromogen
- 12) Wash buffer
- 13) Hematoxylin
- 14) Antibody diluents
- 15) Peroxide block
- 16) Light microscope
- 17) Mounting medium

LIMITATIONS-

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 Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.