

HEPATOCTYTE SPECIFIC ANTIGEN

Format	Catalog no.	Pack size	Dilution
Concentrated	GB 166 A, C	0.1, 1.0 mL	1:100
Prediluted	GB 166 AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

Normal and malignant hepatocytes are both recognized by Hepatocyte Specific Antigen (HSA). Almost all hepatocellular carcinomas reliably express this gene. Combining HSA with CEA, CK7, AFP, and CD10 in a panel can help differentiate hepatocellular carcinoma from cholangiocarcinoma and metastatic adenocarcinoma, according to studies. CEA is the carcinoembryonic antigen.

INTENDED USE -

The OCH1E5 mouse monoclonal antibody, which stands for hepatocyte specific antigen, is designed for in vitro diagnostic use in human tissues that have been fixed and embedded in formalin. Its primary use is to qualitatively identify hepatocyte specific antigen using immunohistochemistry (IHC). A trained pathologist should review the patient's medical history and other diagnostic tests in conjunction with morphological investigations employing appropriate controls to supplement the clinical interpretation of staining or lack thereof.

SUMMARY AND EXPLANATION -

It has been found that Hepatocyte Specific Antigen (HSA) can distinguish between normal and cancerous hepatocytes. The majority of hepatocellular carcinomas consistently display expression. Research has demonstrated that HSA can be utilized in conjunction with Glypican-3, CEA, CK7, AFP, and CD10 in a panel.

PRINCIPLES OF PROCEDURE -

Immunohistochemistry is a multi-step method that can be used to detect antigens in cells and tissues. The primary antibody is bound to its specific epitope in the initial stage. One option is to attach the primary antibody with a secondary antibody, then add an enzyme-labeled polymer; another is to bind the primary antibody directly with an enzyme-labeled polymer. It is by an enzyme-mediated colorimetric reaction that the bound primary antibody can be detected.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE - OCH1E5

ISOTYPE - IgG1/kappa

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

EPITOPE/ ANTIGEN - Hepatocyte Specific Antigen

CELLULAR LOCALIZATION -Cytoplasmic

POSITIVE TISSUE CONTROL - Liver or liver carcinoma

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-Liver or liver carcinoma
- 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.