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| Clone | CLH2 |
| Source | Mouse Monoclonal |
| Cat #  | PM233-6ml RTUPM233-3ml RTUCM233-0.1ml ConcCM233-0.5ml Conc HAM231-3ml RTUHam231-6ml RTU |
| Regulatory Status | IVD |

**MUC5AC- (CLH2)**

**Intended Use:**

This antibody is intended for use to qualitatively identify MUC5AC antigen by light microscopy in formalin fixed, paraffin embedded tissue sections using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient’s clinical history and other diagnostic tests. A qualified pathologist must perform evaluation of the test.

**Summary and Explanation:**

Mucin 5AC glycoprotein (MUC5AC) is a HMW glycoprotein belonging to the superfamily of mucins. Mucins are produced by epithelial cells and can be divided into two families; secretory mucins and membrane bound mucins. MUC5AC is a mucus-forming, secreted mucin that is found in normal gastric and tracheo-bronchial mucosa, but absent from normal colon. MUC5AC expression is present in primary ovarian mucinous cancer but usually absent in colorectal adenocarcinoma, thus showing an expression pattern opposite to MUC2. Together with a panel of antibodies, Anti-MUC5AC may be useful for differential identification of primary mucinous ovarian tumors from colon adenocarcinoma metastatic to the ovary. MUC5AC antibodies may also be useful for identification of intestinal metaplasia as well as in the identification of pancreatic carcinoma and pre-cancerous changes vs. normal pancreas.

**Immunogen:** A synthetic peptide of human MUC5AC tandem repeat.

 **Isotype:** Mouse IgG1,kappa

**Reagent Provided:
 Concentrated format:** Antibody to MUC5AC is diluted in antibody diluent, with 1% bovine serum
 albumin (BSA) and 0.05% sodium azide (NaN3). Recommended dilutions: 1:50 –
 1:100.The antibody dilution and protocol may vary depending on the specimen
 preparation and specific application. Optimal conditions should be
 determined by individual laboratory.

 **Pre-diluted format:** PathnSitu ready to use antibodies are pre tittered to optimal staining
 conditions. Further dilution may loose the activity and may yield to sub
 optimal staining.

**Storage Recommendations:** Store at 2°-8°C. Do not use after expiration date provided on the vial.

**Staining Recommendations:
 Antigen Retrieval Solution:** Use **Tris EDTA Buffer** **(PathnSitu Cat # PS009)** as antigen retrieval
 solution Heat Retrieval Method: Retrieve sections under steam pressure
 for 15 min using PathnSitu’s MERS (Multi Epitope Retrieval System) then
 allow solution to cool for 10 minutes then transfer tissue sections/slides to
 distilled water.

**Primary Antibody:**  Cover the tissue sections with primary antibody and incubate for 30
 min at room temperature when used PathnSitu PolyExcel Detection
 System.

**Detection System:** Refer to PathnSitu PolyExcel detection system protocol or manufacturer’s detection kit staining protocol when used other vendor detection system.

**Cellular Localization:** Cytoplasm

**Positive Control:** Stomach

**Troubleshooting:** Follow the antibody specific protocol recommendations according to data sheet provided. If unusual results occur, contact PathnSitu Technical Support at 040-2701 5544 or techsupport@pathnsitu.com.

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

**Bibliography:**  Reis CA, David L, Nielsen PA, Clausen H, Mirgorodskaya K, Roepstorff P, et al.
 Immunohistochemical study of MUC5AC expression in human gastric
 carcinomas using a novel monoclonal antibody. Int J Cancer 1997;74:112-21.