Anti-MUC5AC / DIA-MUC-OD
Mouse monoclonal anti-gastric cancer cell marker
Clone JAC5

Product Information

Catalog No.:	**DIA-MUC-OD**
Clone:	JAC5
Isotype	Mouse IgG1
Quantity	100µl
Specificity:	MUC5A
Physical State:	Liquid
Species Reactivity:	Human
Positive Control:	Stomach, Endometrium
Visualization:	Cytoplasmic

Presentation:	Purified antibody in Tris pH 7.3-7.7 with 1% BSA, <0.1% NaN3
Applications:	Immunohistochemistry (IHC), standard formalin-fixed paraffin sections
Dilutions:	1:100 - 1:200 IHC-P

(General recommendation, validation of antibody performance/protocol is the responsibility of the end user. Positive/negative controls should be run simultaneously with patient specimen. Interpretation must be made by a qualified pathologist within the context of patient's clinical history/other diagnostic tests.)

Reactivity

Clone JAC5 has been validated specifically for routine immunohistochemical (IHC) detection of MUC5AC in formalin-fixed paraffin-embedded tissue specimen.

Mucin 5AC glycoprotein (MUC5AC) is secretory-type mucin with 641kDa. Mucins are high molecular weight glycoproteins produced by epithelial cells and can be divided into two families; secretory mucins and membrane bound mucins. MUC5AC is highly expressed in surface mucosal cells of respiratory tract and stomach epithelia as a mucus-forming secreted, but not in normal colon cells. A number of carcinomas overexpress MUC5AC. MUC5AC expression is indicated in carcinomas wherein the type is defined as diffuse and infiltrative, and in carcinomas located mainly in the antrum. Moreover MUC5AC expression is correlated with colorectal signet-ring cell carcinoma: Overexpression of MUC5AC relates to the carcinogenesis, malignant potential, progression, and clinical behaviors. MUC5AC expression is present in primary ovarian mucinous cancer but usually absent in colorectal adenocarcinoma, thus showing an expression pattern opposite to MUC2.

Anti-MUC5AC may be useful for identification of intestinal metaplasia as well as in the identification of pancreatic carcinoma and pre-cancerous changes vs. normal pancreas. MUC5AC antibodies may also be useful for differential identification of primary mucinous ovarian tumors from colon adenocarcinoma metastatic to the ovary.

Instructions for Use

Immunohistochemical staining of standard formalin-fixed paraffin sections

Deparaffinize and rehydrate according to standard procedures. Heat induced epitope retrieval (HIER) is required (pH 9-10 for 10-30 minutes). For immunohistochemical detection different techniques can be used: indirect immunoenzyme labeling with a secondary antibody conjugate, biotin/(strept)avidin-based detection, soluble enzyme immune complex or polymer-based detection. The antibody can be adapted for use on automated staining instruments.

Intented use / regulatory status

Europe: For in Vitro Diagnostic Use / All other countries: For Research Use only

Storage and Stability

Store at 2-8°C. Do not freeze. The antibody is stable until the date indicated on the label, when stored properly.

Safety Notes

The material contains <1% sodium azide as preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material. Avoid skin and eye contact, inhalation and ingestion.

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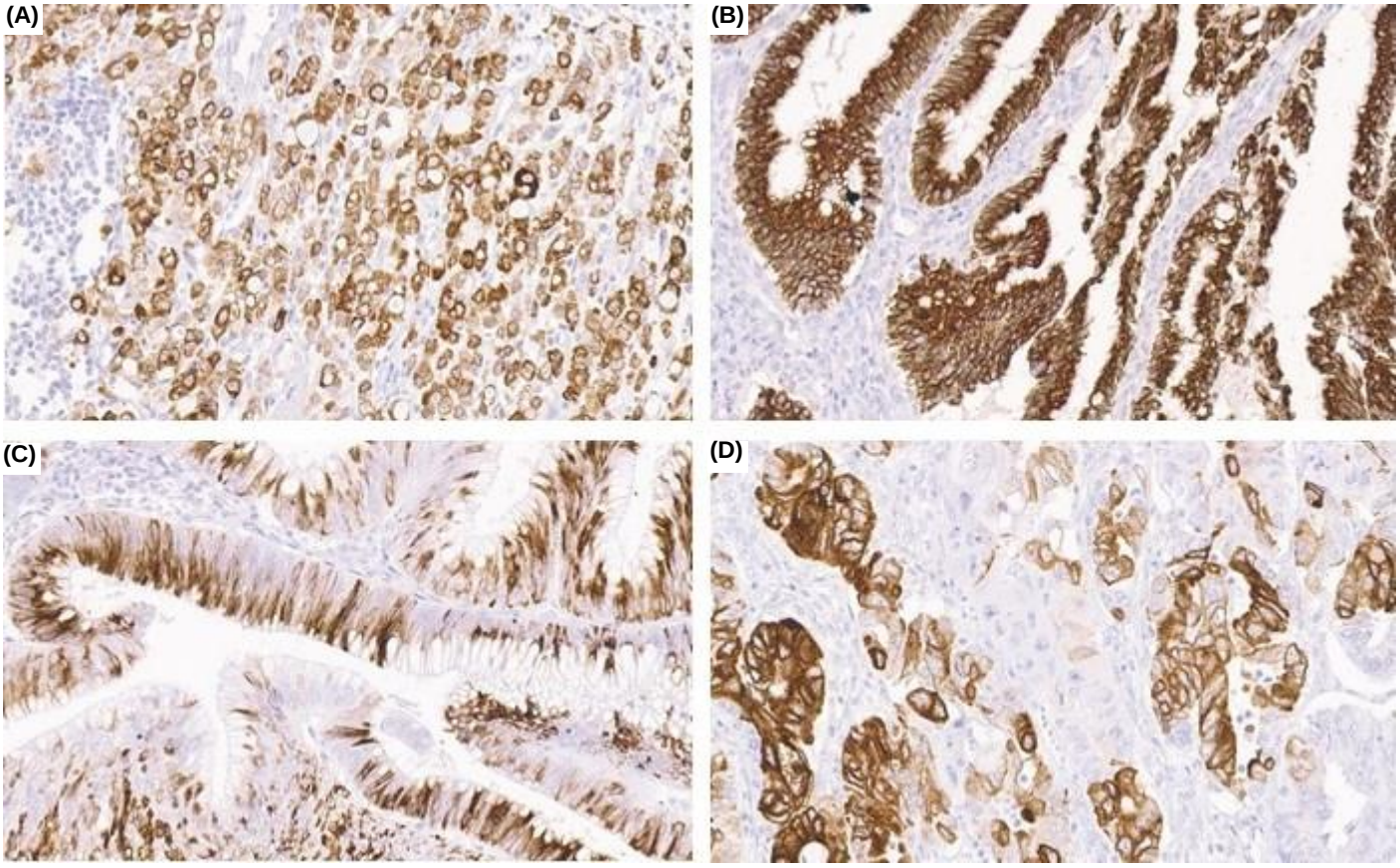
Figures

Immunohistochemistry of human MUC5AC in routine formalin-fixed paraffin-embedded tissue samples

A: Intense MUC5AC immunostaining in stomach cancer (diffuse type).
B: Strong diffuse MUC5AC staining in a mucinous carcinoma of the ovary.
C: Positive MUC5AC staining in a low grade adenoma of the colon.
D: Malignant mixed Müllerian tumor of the uterus with strong focal MUC5AC positivity in epithelial tumor cells.



(pictures courtesy of Prof. Guido Sauter, Department of Pathology, University Hospital Eppendorf, Hamburg, Germany)

References

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