

## **Product Datasheet**

## MUC4 Antibody / Mucin-4 (orb607122)

**Description** The major constituents of mucus, the viscous secretion that covers epithelial

surfaces such as those in the trachea, colon, and cervix, are highly glycosylated

proteins called mucins. These glycoproteins play important roles in the

and differentiation. This gene encodes an integral membrane glycoprotein found on the cell surface, although secreted isoforms may exist. MUC-4 transcripts have been detected in normal respiratory epithelium and lung. MUC-4 is a very

protection of the epithelial cells and have been implicated in epithelial renewal

specific (100%) and sensitive (90%) marker of lung adenocarcinomas and is negative for mesotheliomas. Reportedly, MUC-4 expression in invasive ductal

carcinoma of the pancreas is an independent factor for poor prognosis.

Species/Host Mouse

Reactivity Human

**Conjugation** Unconjugated

**Tested Applications** IHC-P

**Immunogen** Amino acids 1730-1864 from the human protein were used as the immunogen

for this MUC4 antibody.

**Preservatives** 0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin (US sourced) and 0.05% sodium

azide

**Storage** Store the MUC4 antibody at 2-8°C (with azide) or aliquot and store at -20°C or

colder (without azide).

**Note** For research use only

**Application notes** The concentration stated for each application is a general starting point.

Variations in protocols, secondaries and substrates may require the MUC4 antibody to be titered up or down for optimal performance.1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and

incubate at RT for 30 min.





**Formula** 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide

**Isotype** Mouse IgG2b, kappa

**Clonality** Monoclonal

Clone Number MUC4/3105

**Antibody Type** Primary Antibody

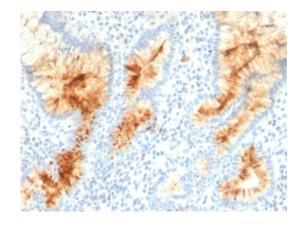
**Purity** Protein G affinity chromatography

Uniprot ID Q99102

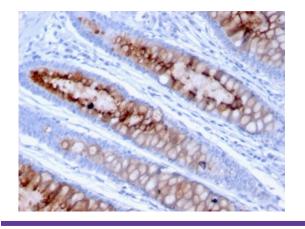
**Hazard Information** This MUC4 antibody is available for research use only.

**Dilution Range** Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT

**Expiration Date** 12 months from date of receipt.



IHC testing of FFPE human gastric carcinoma with MUC4 antibody (clone MUC4/3105). HIER: requires steaming of sections in 10mM citrate buffer, pH6, for 10-20 min and allow to cool before testing.



IHC testing of FFPE human colon carcinoma with MUC4 antibody (clone MUC4/3105). HIER: requires steaming of sections in 10mM citrate buffer, pH6, for 10-20 min and allow to cool before testing.

## **Biorbyt Ltd.**

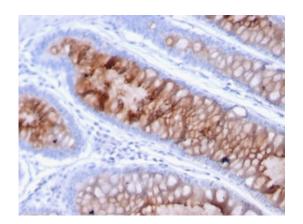
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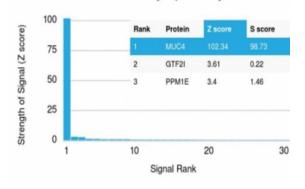




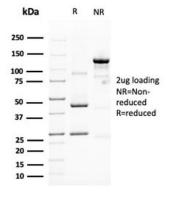


IHC testing of FFPE human colon carcinoma with MUC4 antibody (clone MUC4/3105). HIER: requires steaming of sections in 10mM citrate buffer, pH6, for 10-20 min and allow to cool before testing.

Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19000 full-length human proteins using MUC4 antibody (clone MUC4/3105). These results demonstrate the foremost specificity of the MUC4/3105 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free MUC4 antibody (clone MUC4/3105) as confirmation of integrity and purity.