

## Anti-Mucin 5AC/MUC5AC Antibody Picoband™

Catalog Number: PB9286

### About MUC5AC

Mucin-5AC is a protein that in humans is encoded by the MUC5AC gene. It is mapped to 11p15.5. MUC5AC is highly expressed in adult trachea and stomach. This gene has been linked to mucus hypersecretion in the pulmonary tracts and associated to chronic obstructive pulmonary disease (COPD). It has been showed that activation of the NF-kappa-B signaling pathway by inflammatory cytokine TNF-alpha upregulated MUC5AC mRNA expression nearly 6-fold. MUC5AC is also a direct and critical mediator of resistance during intestinal nematode infection.

### Overview

|                      |                                                                                                                                                                                                       |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name         | Anti-Mucin 5AC/MUC5AC Antibody Picoband™                                                                                                                                                              |
| Reactive Species     | Human, Rat                                                                                                                                                                                            |
| Description          | Boster Bio Anti-Mucin 5AC/MUC5AC Antibody Picoband™ catalog # PB9286. Tested in IHC applications. This antibody reacts with Human, Rat.                                                               |
| Application          | IHC                                                                                                                                                                                                   |
| Clonality            | Polyclonal                                                                                                                                                                                            |
| Formulation          | Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .                                                                                                          |
| Storage Instructions | Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles. |
| Host                 | Rabbit                                                                                                                                                                                                |
| Uniprot ID           | P98088                                                                                                                                                                                                |

### Technical Details

|                               |                                                                                                |
|-------------------------------|------------------------------------------------------------------------------------------------|
| Immunogen                     | E.coli-derived human Mucin 5AC recombinant protein (Position: D4848-H5030).                    |
| Predicted Reactive Species    | Hamster                                                                                        |
| Recommended Detection Systems | Boster recommends HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P). |
| Cross Reactivity              | No cross-reactivity with other proteins                                                        |
| Isotype                       | Rabbit IgG                                                                                     |
| Form                          | Lyophilized                                                                                    |
| Concentration                 | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.                      |
| Purification                  | Immunogen affinity purified.                                                                   |

**Suggested Dilutions**

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human, Rat, By Heat

## Anti-Mucin 5AC/MUC5AC Antibody Picoband™ (PB9286) Images

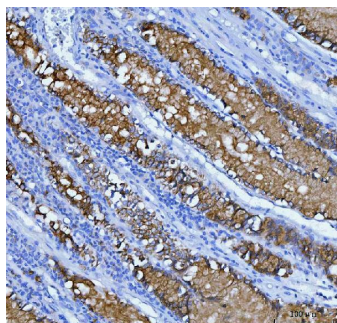


Figure 1. IHC analysis of Mucin-5AC using anti-Mucin-5AC antibody (PB9286). Mucin-5AC was detected in a paraffin-embedded section of human gastric carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Mucin-5AC Antibody (PB9286) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

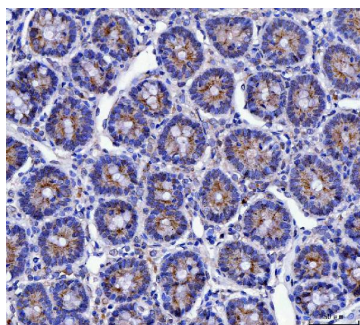


Figure 2. IHC analysis of Mucin-5AC using anti-Mucin-5AC antibody (PB9286). Mucin-5AC was detected in a paraffin-embedded section of rat stomach tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Mucin-5AC Antibody (PB9286) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

## 2 Publications Citing This Product

1. PubMed ID: 34160729, Huang J,Liu J,Chang G,Wang Y,Ma N,Roy AC,Shen X.Glutamine Supplementation Attenuates the Inflammation Caused by LPS-Induced Acute Lung Injury in Mice by Regulating the TLR4/MAPK Signaling Pathway.Inflammation.2021 Jun 23.doi:10.1007/s10753-021-01491-2.Epub ahead of print.PMID:34160729.

2. PubMed ID: 23392769, Zhou J, Perelman Jm, Kolosov Vp, Zhou X. Mol Cell Biochem. 2013 May;377(1-2):75-85. Doi: 10.1007/S11010-013-1572-3. Epub 2013 Feb 8. Neutrophil Elastase Induces Muc5Ac Secretion Via Protease-Activated Receptor 2.

Visit [bosterbio.com/anti-mucin-5ac-picoband-trade-antibody-pb9286-boster.html](http://bosterbio.com/anti-mucin-5ac-picoband-trade-antibody-pb9286-boster.html) to see all 2 publications.

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