

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

Catalog Number: PA2303

### 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

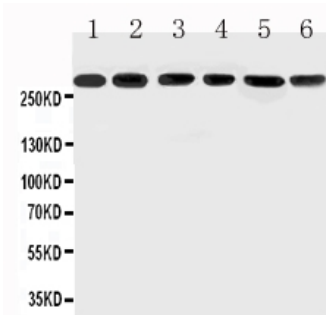
Product Name	Anti-Mucin 5AC/MUC5AC Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Mucin 5AC/MUC5AC Antibody catalog # PA2303. Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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	A synthetic peptide corresponding to a sequence at the N-terminus of human Mucin 5AC.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and 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	Western blot, 0.1-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, By Heat

## Anti-Mucin 5AC/MUC5AC Antibody Picoband® (PA2303) Images



Anti-Mucin 5AC antibody, PA2303, All Western blotting  
All lanes: Anti-MUC5AC(PA2303) at 0.5ug/ml  
Lane 1: SGC Whole Cell Lysate at 40ug  
Lane 2: HELA Whole Cell Lysate at 40ug  
Lane 3: COLO320 Whole Cell Lysate at 40ug  
Lane 4: SW620 Whole Cell Lysate at 40ug  
Lane 5: MCF-7 Whole Cell Lysate at 40ug  
Lane 6: PANC Whole Cell Lysate at 40ug  
Predicted bind size: 527KD  
Observed bind size: 300KD

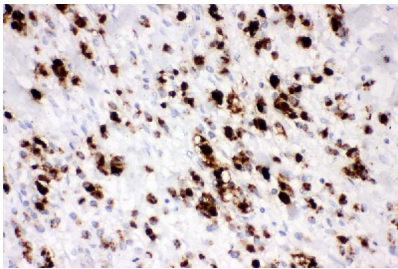


Figure 2. IHC analysis of Mucin 5AC using anti-Mucin 5AC antibody (PA2303).

Mucin 5AC was detected in paraffin-embedded section of human gastric cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Mucin 5AC Antibody (PA2303) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) 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-antibody-pa2303-boster.html](http://bosterbio.com/anti-mucin-5ac-antibody-pa2303-boster.html) to see all 2 publications.

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