

Anti-MUC13 Antibody Picoband®

Catalog Number: A02674-2

About MUC13

Epithelial mucins, such as MUC13, are a family of secreted and cell surface glycoproteins expressed by ductal and glandular epithelial tissues. It is mapped to 3q21.2. Mucins are a family of high molecular weight, heavily glycosylated proteins (glycoconjugates) produced by epithelial tissues in most animals. Mucins' key characteristic is their ability to form gels; therefore they are a key component in most gel-like secretions, serving functions from lubrication to cell signalling to forming chemical barriers. They often take an inhibitory role. Some mucins are associated with controlling mineralization, including nacre formation in mollusks, calcification in echinoderms and bone formation in vertebrates. They bind to pathogens as part of the immune system. Overexpression of the mucin proteins, especially MUC1, is associated with many types of cancer. Although some mucins are membrane-bound due to the presence of a hydrophobic membrane-spanning domain that favors retention in the plasma membrane, most mucins are secreted as principal components of mucus by mucous membranes or are secreted to become a component of saliva.

Overview

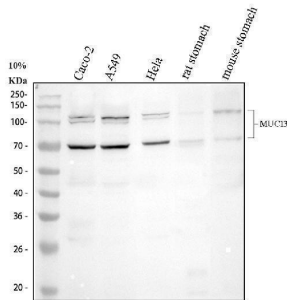
Product Name	Anti-MUC13 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MUC13 Antibody Picoband® catalog # A02674-2. Tested in ELISA, IF, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees 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	ELISA, IF, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
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	Q9H3R2

Technical Details

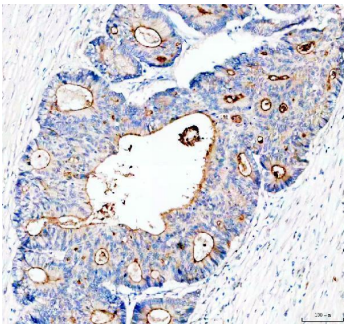
Immunogen	E.coli-derived human MUC13 recombinant protein (Position: E226-S312).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	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, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human, Mouse Immunofluorescence, 5ug/ml, Human ELISA, 0.1-0.5ug/ml, -

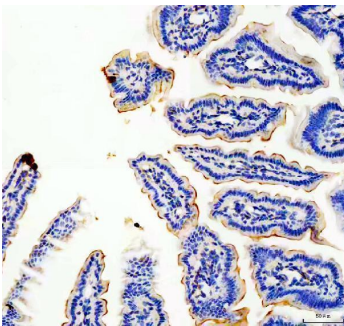
Anti-MUC13 Antibody Picoband® (A02674-2) Images



Western blot analysis of MUC13 using anti-MUC13 antibody (A02674-2). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Caco-2 whole cell lysates, Lane 2: human A549 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: rat stomach tissue lysates, Lane 5: mouse stomach tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MUC13 antigen affinity purified polyclonal antibody (A02674-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for MUC13 at approximately 75, 110-120 kDa. The expected band size for MUC13 is at 55 kDa.

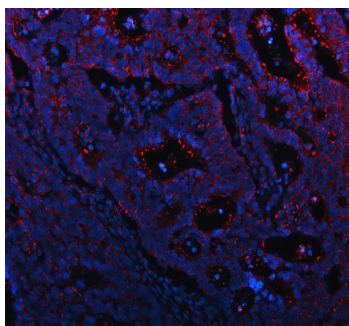


IHC analysis of MUC13 using anti-MUC13 antibody (A02674-2). MUC13 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-MUC13 Antibody (A02674-2) 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.



IF analysis of AMUC13 using anti-MUC13 antibody (A02674-2). MUC13 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0,

IF analysis of AMUC13 using anti-MUC13 antibody (A02674-2). MUC13 was detected in a paraffin-embedded section of human colon cancer 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 5 ug/mL rabbit anti-MUC13 Antibody (A02674-2) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-MUC13 Antibody

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