

## Anti-Cytokeratin 20/Krt20 Antibody Picoband®

Catalog Number: A02828-2

### About Krt20

Keratin 20, often abbreviated CK20, is a protein that in humans is encoded by the KRT20 gene. This gene encodes a member of the keratin protein family and is found within a cluster of cytokeratin genes on chromosome 11. Keratins are cytoskeletal proteins that are preferentially expressed in epithelial cells. The encoded protein may help maintain intermediate filament organization in intestinal epithelium. Phosphorylation of this protein may also influence mucin secretion in the small intestine.

### Overview

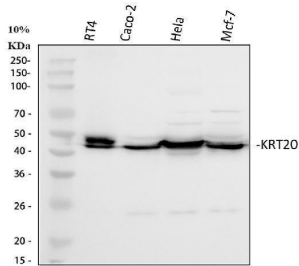
Product Name	Anti-Cytokeratin 20/Krt20 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Cytokeratin 20/Krt20 Antibody Picoband® catalog # A02828-2. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband 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, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 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	Q9D312

### Technical Details

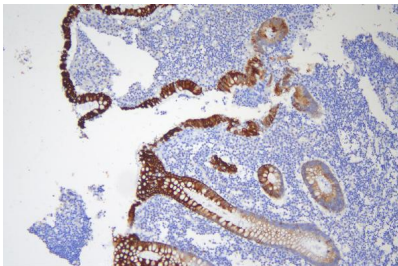
Immunogen	E.coli-derived mouse Cytokeratin 20/Krt20 recombinant protein (Position: R29-V431).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
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, 0.1-0.25ug/ml, Human, Mouse Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 2ug/ml, Human, Rat Flow Cytometry (Fixed)  1-3ug/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5ug/ml, -

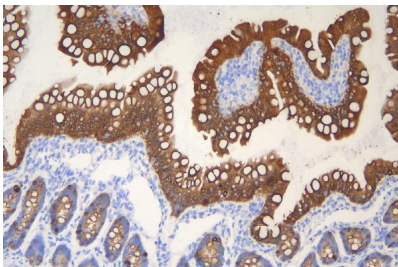
## Anti-Cytokeratin 20/Krt20 Antibody Picoband® (A02828-2) Images



Western blot analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human RT4 whole cell lysates, Lane 2: human Caco-2 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human MCF-7 whole cell 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-Cytokeratin 20/Krt20 antigen affinity purified polyclonal antibody (Catalog # A02828-2) at 0.25 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 at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Cytokeratin 20/Krt20 at approximately 48 kDa. The expected band size for Cytokeratin 20/Krt20 is at 48 kDa.

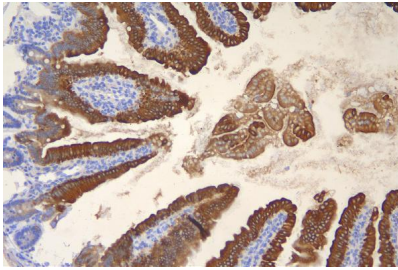


IHC analysis of Krt20 using anti-Krt20 antibody (A02828-2). Krt20 was detected in paraffin-embedded section of human appendix tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Krt20 Antibody (A02828-2) 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.

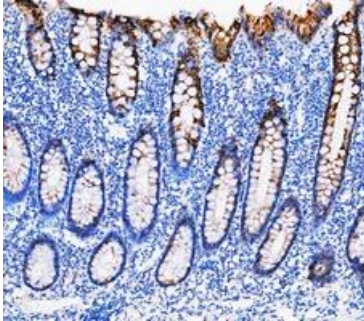


IHC analysis of Krt20 using anti-Krt20 antibody (A02828-2). Krt20 was detected in paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Krt20 Antibody (A02828-2) 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.

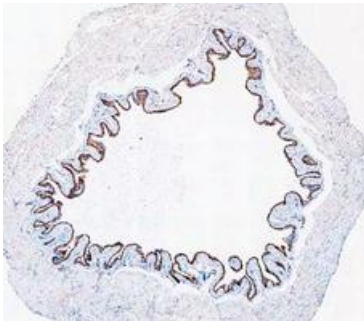
IHC analysis of Krt20 using anti-Krt20 antibody (A02828-2). Krt20 was detected in paraffin-embedded section of mouse intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The



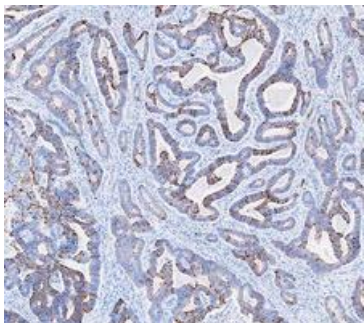
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IHC analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Cytokeratin 20/Krt20 was detected in a paraffin-embedded section of human appendix tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Cytokeratin 20/Krt20 Antibody (A02828-2) for 30 minutes at 37°C. HRP-AffiniPure 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.

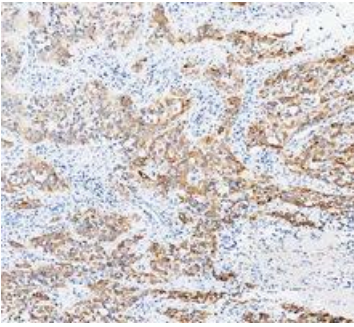


IHC analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Cytokeratin 20/Krt20 was detected in a paraffin-embedded section of mouse bladder tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Cytokeratin 20/Krt20 Antibody (A02828-2) for 30 minutes at 37°C. HRP-AffiniPure 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.

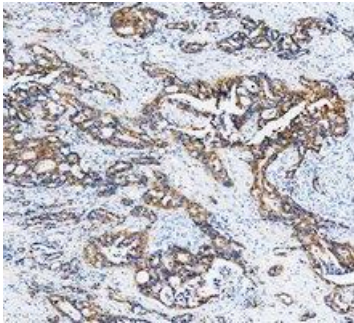


IHC analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Cytokeratin 20/Krt20 was detected in a paraffin-embedded section of rat bladder tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Cytokeratin 20/Krt20 Antibody (A02828-2) for 30 minutes at 37°C. HRP-AffiniPure 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.

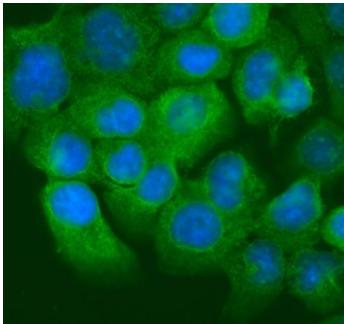
IHC analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Cytokeratin 20/Krt20 was detected in a paraffin-embedded section of human stomach cancer tissue. Heat mediated antigen retrieval was



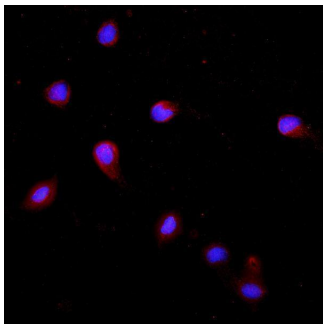
performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Cytokeratin 20/Krt20 Antibody (A02828-2) for 30 minutes at 37°C. HRP-AffiniPure Goat Anti-Rabbit IgG was used as secondary 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.



IHC analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Cytokeratin 20/Krt20 was detected in a paraffin-embedded section of human bladder 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 1 ug/ml rabbit anti-Cytokeratin 20/Krt20 Antibody (A02828-2) for 30 minutes at 37°C. HRP-AffiniPure 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.

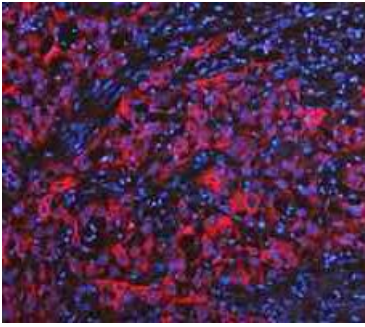


IF analysis of Krt20 using anti-Krt20 antibody (A02828-2). Krt20 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-Krt20 Antibody (A02828-2) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 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.

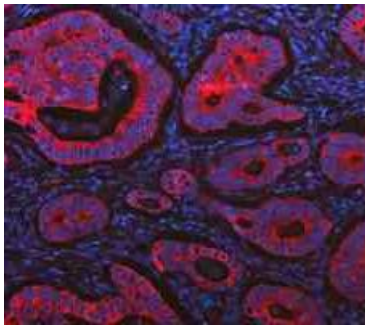


IF analysis of Krt20 using anti-Krt20 antibody (A02828-2). Krt20 was detected in immunocytochemical section of NRK cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-Krt20 Antibody (A02828-2) overnight at 4°C. DyLight®550 Conjugated Goat Anti-Rabbit IgG (BA1135) was used as secondary antibody at 1:100 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.

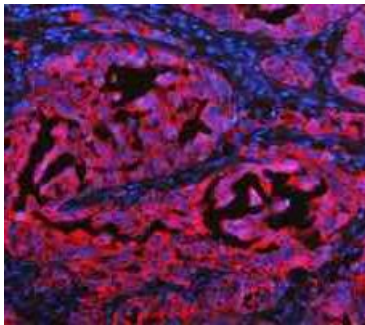
IF analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Cytokeratin 20/Krt20 was detected in a paraffin-embedded section of human bladder cancer tissue. Heat mediated antigen retrieval was



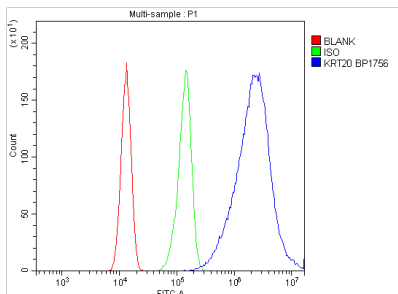
performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 25 ug/mL rabbit anti-Cytokeratin 20/Krt20 Antibody (A02828-2) overnight at 4°C. DyLight 594 Conjugated AffiniPure Goat Anti-rabbit IgG(H+L) (BA1142) was used as secondary antibody at 1:100 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.



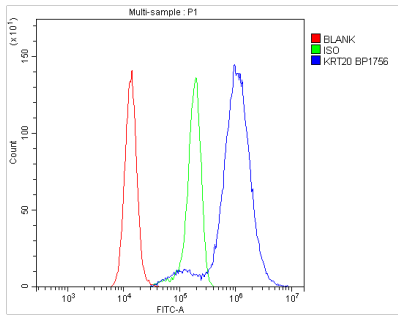
IF analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Cytokeratin 20/Krt20 was detected in a paraffin-embedded section of human stomach cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 25 ug/mL rabbit anti-Cytokeratin 20/Krt20 Antibody (A02828-2) overnight at 4°C. DyLight 594 Conjugated AffiniPure Goat Anti-rabbit IgG(H+L) (BA1142) was used as secondary antibody at 1:100 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.



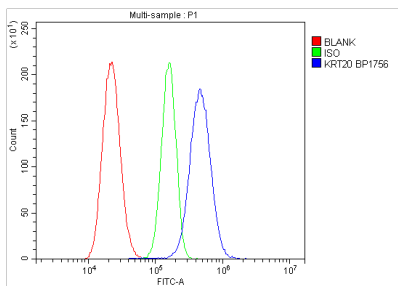
IF analysis of Cytokeratin 20/Krt20 using anti-Cytokeratin 20/Krt20 antibody (A02828-2). Cytokeratin 20/Krt20 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 25 ug/mL rabbit anti-Cytokeratin 20/Krt20 Antibody (A02828-2) overnight at 4°C. DyLight 594 Conjugated AffiniPure Goat Anti-rabbit IgG(H+L) (BA1142) was used as secondary antibody at 1:100 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.



Flow Cytometry analysis of CACO-2 cells using anti-Krt20 antibody (A02828-2). Overlay histogram showing CACO-2 cells stained with A02828-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Krt20 Antibody (A02828-2, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Flow Cytometry analysis of HeLa cells using anti-Krt20 antibody (A02828-2). Overlay histogram showing HeLa cells stained with A02828-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Krt20 Antibody (A02828-2, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Flow Cytometry analysis of RH35 cells using anti-Krt20 antibody (A02828-2). Overlay histogram showing RH35 cells stained with A02828-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Krt20 Antibody (A02828-2, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

## 1 Publications Citing This Product

1. PubMed ID: -, Wu T,Wang X,Ren K,Huang X,Liu J:The Alterations in Methylene Blue/Light-Treated Frozen Plasma Proteins Revealed by Proteomics.Transfus Med Hemother 2021.doi:10.1159/000515119.

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Anti-Cytokeratin 20/Krt20 Antibody

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