

Anti-Cytokeratin 19 KRT19 Antibody Picoband® (monoclonal, 3D4)

Catalog Number: M02101-2

About KRT19

Keratin, type I cytoskeletal 19 is a protein that in humans is encoded by the KRT19 gene. The protein encoded by this gene is a member of the keratin family. It is specifically expressed in the periderm, the transiently superficial layer that envelops the developing epidermis. The type I cytokeratins are clustered in a region of chromosome 17q12-q21. Due to its high sensitivity, KRT19 is the most used marker for the RT-PCR-mediated detection of tumor cells disseminated in lymph nodes, peripheral blood, and bone marrow of breast cancer patients. Keratin 19 is often used together with keratin 8 and keratin 18 to differentiate cells of epithelial origin from hematopoietic cells in tests that enumerate circulating tumor cells in blood.

Overview

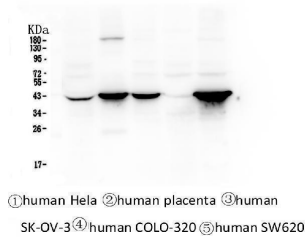
Product Name	Anti-Cytokeratin 19 KRT19 Antibody Picoband® (monoclonal, 3D4)
Reactive Species	Human
Description	Boster Bio Anti-Cytokeratin 19 KRT19 Antibody Picoband® (monoclonal, 3D4) catalog # M02101-2. Tested in IF, IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates 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	IF, IHC, WB
Clonality	Monoclonal 3D4
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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	Mouse
Uniprot ID	P08727

Technical Details

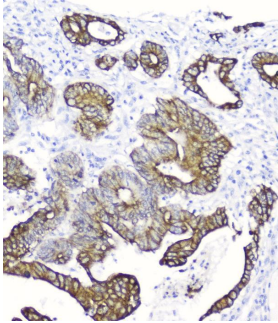
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Cytokeratin 19, different from the related mouse and rat sequences by nine amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG1

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 Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml Immunofluorescence, 2ug/ml

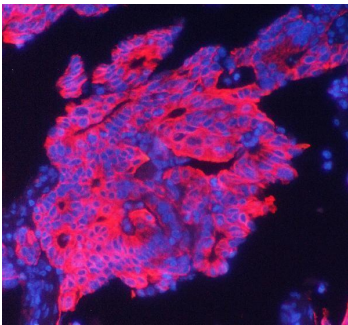
Anti-Cytokeratin 19 KRT19 Antibody Picoband® (monoclonal, 3D4) (M02101-2) Images



Western blot analysis of Cytokeratin 19 using anti-Cytokeratin 19 antibody (M02101-2). 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 50ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human placenta tissue lysates, Lane 3: human SK-OV-3 whole cell lysates, Lane 4: human COLO-320 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Cytokeratin 19 antigen affinity purified monoclonal antibody (Catalog # M02101-2) 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-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system.



IHC analysis of Cytokeratin 19 using anti-Cytokeratin 19 antibody (M02101-2). Cytokeratin 19 was detected in paraffin-embedded section of human intestinal 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 2ug/ml mouse anti-Cytokeratin 19 Antibody (M02101-2) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.



IF analysis of Cytokeratin 19 using anti-Cytokeratin 19 antibody (M02101-2). Cytokeratin 19 was detected in paraffin-embedded section of human intestinal cancer tissues. 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 mouse anti-Cytokeratin 19 Antibody (M02101-2) overnight at 4°C. DyLight®550 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:200 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

5 Publications Citing This Product

1. PubMed ID: 29494688, Wang W, Said A, Wang B, Qu G, Xu Q, Liu B, Shen Z. PLoS One. 2018 Mar 1;13(3):e0193876. doi: 10.1371/journal.pone.0193876. eCollection 2018. Establishment and evaluation of the goose embryo epithelial (GEE) cell line as a new model for propagation...

2. PubMed ID: 28656299, Quan, J., Du, Q., Hou, Y., Wang, Z., & Zhang, J. (2017). Utilization of E-cadherin by monocytes from tumour cells plays key roles in the progression of bone invasion by oral squamous cell carcinoma. *Oncology Reports*, 38(2), 850-858. Advance online...

3. PubMed ID: 24963492, Li M, Zhang B, Zhang Z, Liu X, Qi X, Zhao J, Jiang Y, Zhai H, Ji Y, Luo D. *Biomed Res Int*. 2014;2014:981261. Doi: 10.1155/2014/981261. Epub 2014 May 22. Stem Cell-Like Circulating Tumor Cells Indicate Poor Prognosis In Gastric Cancer.

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