

Anti-Cytokeratin 19/KRT19 Antibody Picoband®

Catalog Number: PA1335

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

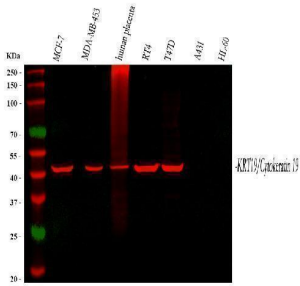
Product Name	Anti-Cytokeratin 19/KRT19 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Cytokeratin 19/KRT19 Antibody catalog # PA1335. Tested in IHC, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior 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, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	P08727

Technical Details

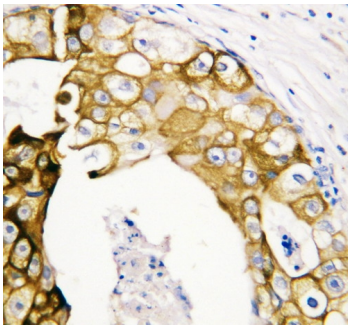
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Cytokeratin 19.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) 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	Immunocytochemistry , 0.5-1ug/ml, Human, - Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Human, - Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Western blot, 0.1-0.5ug/ml, Human

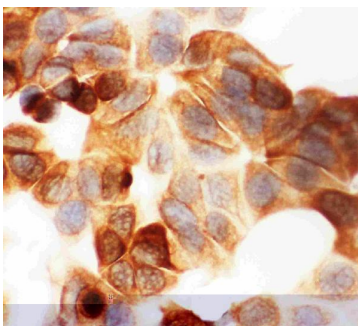
Anti-Cytokeratin 19/KRT19 Antibody Picoband® (PA1335) Images



Western blot analysis of Cytokeratin 19 using anti-Cytokeratin 19 antibody (PA1335). 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 MCF-7 whole cell lysates, Lane 2: human MDA-MB-453 whole cell lysates, Lane 3: human placenta tissue lysates, Lane 4: human RT4 whole cell lysates, Lane 5: human T-47D whole cell lysates, Lane 6: human A431 whole cell lysates, Lane 7: human HL-60 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 19 antigen affinity purified polyclonal antibody (Catalog # PA1335) 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-DyLight 647 Conjugated secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. A specific band was detected for Cytokeratin 19 at approximately 44 kDa. The expected band size for Cytokeratin 19 is at 44 kDa.

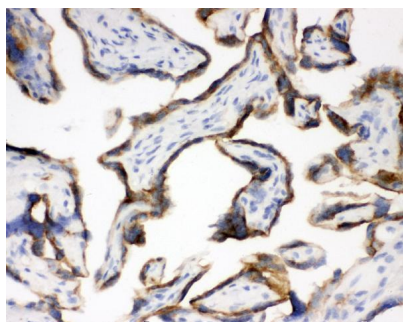


IHC analysis of Cytokeratin 19 using anti-Cytokeratin 19 antibody (PA1335). Cytokeratin 19 was detected in a paraffin-embedded section of Human Oesophagus Squama Cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Cytokeratin 19 Antibody (PA1335) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



ICC analysis of Cytokeratin 19 using anti-Cytokeratin 19 antibody (PA1335). Cytokeratin 19 was detected in an immunocytochemical section of MCF-7 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 1 ug/ml rabbit anti-Cytokeratin 19 Antibody (PA1335) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

IHC analysis of Cytokeratin 19 using anti-Cytokeratin 19 antibody (PA1335). Cytokeratin 19 was detected in frozen section of human placenta tissues. The tissue section was



blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Cytokeratin 19 Antibody (PA1335) 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.

6 Publications Citing This Product

1. PubMed ID: 32176389, Wu T, Tang C, Chen Y, Yong X, Liu Z, Jiang L, Zeng Q, Tao R. Regulatory effect of 17beta-estradiol on the expression of beta-defensin-2 and proinflammatory cytokines in human oral epithelial cells. *J Oral Pathol Med.* 2020 Apr;49(4):365-372. doi:10.1111/jop.13016. Epub 2020
2. PubMed ID: 22211239, Yin D, Tian L, Ye Y, Li K, Wang J, Cheng P, Chen A, Guo F, Huang H. *Int J Mol Med.* 2012 Apr;29(4):587-92. Doi: 10.3892/ijmm.2011.871. Epub 2011 Dec 29. Nanog And ??-Catenin: A New Convergence Point In Epsc Proliferation And Differentiation.
3. 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...

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