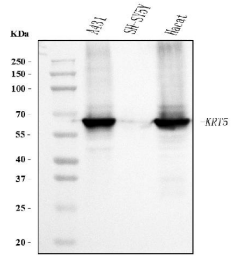
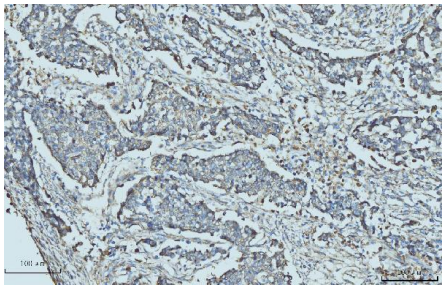
Product Data Sheet:
Cytokeratin 5 Mouse Monoclonal Antibody

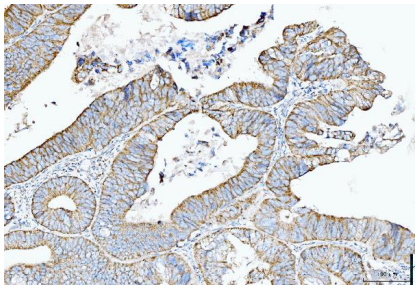
Cat. No:	MAB-94762
Conjugate:	Unconjugated
Size:	200 ug
Clone:	5D3FT
Concentration:	1mg/ml
Host:	Mouse
Isotype:	IgG2b
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human Cytokeratin 5 (286-317aa KVELEAKVDALMDEINFMKMFFDAELSQMQTH), different from the related mouse sequence by one amino acid, and identical to the related rat sequence.
Reactivity:	Human
Applications:	Western blot, 0.5-1 ug/ml Immunohistochemistry (Paraffin-embedded Section): 4-10 ug/ml Immunocytochemistry: 10 ug/ml Immunofluorescence,: 10 ug/ml Immunofluorescence, 10 ug/ml Flow Cytometry: 1-3 ug/1×106 cells
Molecular Weight:	62 kDa
Purification:	Immunogen affinity purified.
Background:	Cytokeratin 5, also known as KRT5, K5, or CK5, is a protein that is encoded in humans by the KRT5 gene. The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in the basal layer of the epidermis with family member KRT14. Mutations in these genes have been associated with a complex of diseases termed epidermolysis bullosa simplex. The type II cytokeratins are clustered in a region of chromosome 12q12-q13.
Form:	Lyophilized: Add 0.2ml distilled water to obtain a concentration of 1mg/ml
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Storage:	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 freezing and thawing.



Western blot analysis of Cytokeratin 5



IHC analysis of Cytokeratin 5 using anti-



IHC analysis of Cytokeratin 5 using anti-

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using anti- Cytokeratin 5 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The
sample well of each lane was loaded with 30 ug of sampleunder reducing conditions.

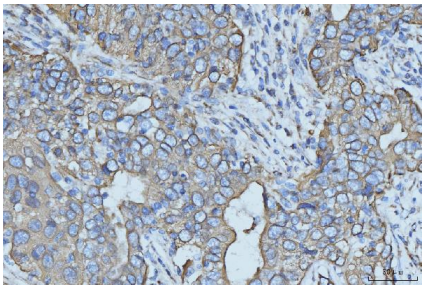
Lane 1: human A431 whole cell lysates

Lane 2: human SH-SY5Y whole cell lysates

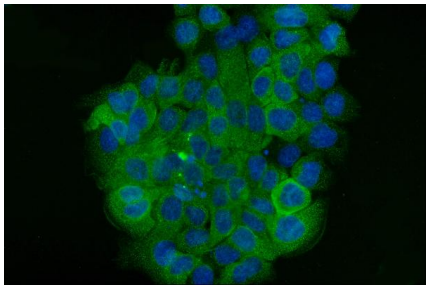
Lane 3: human Hacat whole cell lysates. After electrophoresis, proteins were transferred to a
nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti- Cytokeratin 5 antigen affinity purified monoclonal antibody 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 with Tanon 5200 system. A specific band was detected for Cytokeratin 5 at approximately 62 kDa. The expected band size for Cytokeratin 5 is at 62 kDa.

Cytokeratin 5 antibody. Cytokeratin 5 was detected in a paraffin-embedded section of human lung 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 mouse anti-Cytokeratin 5 Antibody 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 Strepavidin- Biotin-Complex (SABC) with DAB as the chromogen.

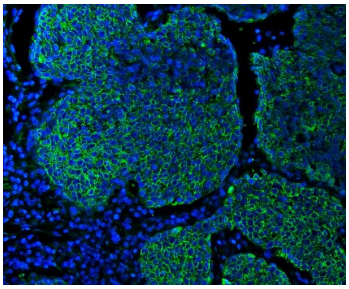
Cytokeratin 5 antibody. Cytokeratin 5 was detected in a paraffin-embedded section of human rectal moderately differentiated adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Cytokeratin 5 Antibody 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 Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC analysis of Cytokeratin 5 using anti-Cytokeratin 5 antibody. Cytokeratin 5 was detected in a paraffin-embedded section
of human metaplasia of squamous cells of the renal pelvis 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 mouse anti- Cytokeratin 5 Antibody 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 Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IF analysis of Cytokeratin 5 using anti-Cytokeratin 5 antibody Cytokeratin 5 was detected in an immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL mouse anti-Cytokeratin 5 Antibody overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG 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 5 using anti-Cytokeratin 5 antibody. Cytokeratin 5 was detected in a paraffin-embedded section of human lung 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 mouse anti-Cytokeratin 5 Antibody overnight at 4°C. Biotin conjugated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using DyLight®488 Conjugated Avidin. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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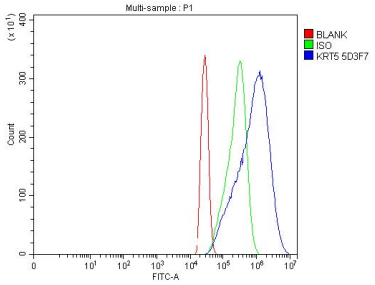

Flow Cytometry analysis of A431 cells using anti-Cytokeratin 5 antibody . Overlay histogram showing A431 cells stained with Cytokeratin 5 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti- Cytokeratin 5 Antibody , 1 ug/1×106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 ug/1×106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 ug/1×106) used under the same conditions. Unlabelled sample (Red line) was also used
as a control.