

Basic Information

Product Name	Anti-Cytokeratin 5/KRT5 Antibody (Clone#5D3F7)	
Gene Name	KRT5	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2b	
Species Reactivity	human	
Tested Application	WB, IHC, ICC/IF, IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Cytokeratin 5, different from the related mouse sequence by one amino acid, and identical to the related rat sequence.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	62 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Immunofluorescence (IF) : 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

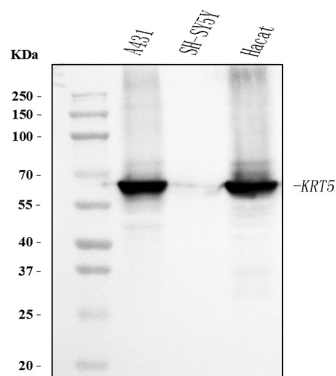
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

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.

Selected Validation Data



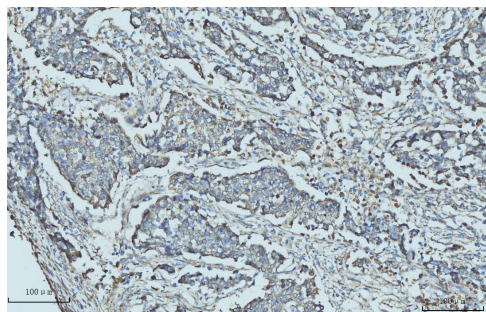
Western blot analysis of Cytokeratin 5/KRT5 using anti-Cytokeratin 5/KRT5 antibody (M00398-6). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: A431 whole cell lysates,

Lane 2: SH-SY5Y whole cell lysates,

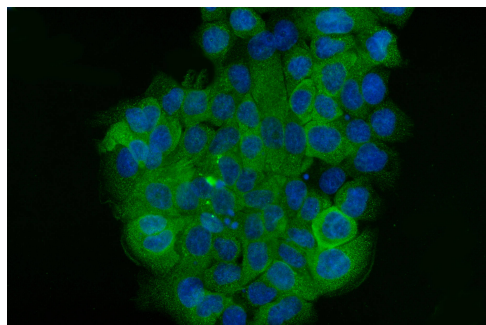
Lane 3: Hacat whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Cytokeratin 5/KRT5 antigen affinity purified monoclonal antibody (M00398-6) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Cytokeratin 5/KRT5 at approximately 62 kDa. The expected band size for Cytokeratin 5/KRT5 is at 62 kDa.



IHC analysis of Cytokeratin 5/KRT5 using anti-Cytokeratin 5/KRT5 antibody (M00398-6).

Cytokeratin 5/KRT5 was detected in a paraffin-embedded section of human lung cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-Cytokeratin 5/KRT5 Antibody (M00398-6) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.

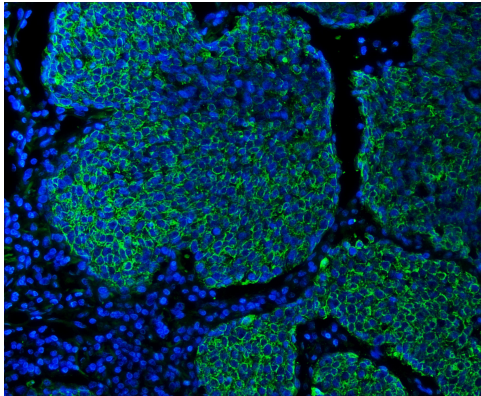


IF analysis of Cytokeratin 5/KRT5 using anti-Cytokeratin 5/KRT5 antibody (M00398-6).

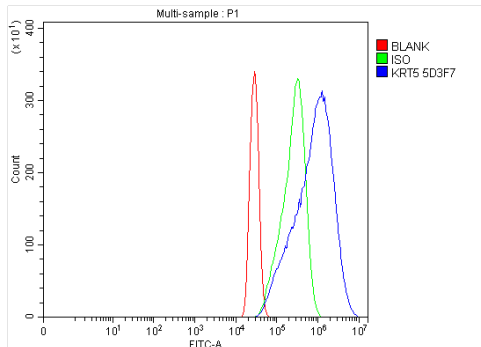
Cytokeratin 5/KRT5 was detected in an immunocytochemical section of A431 cells. The section was incubated with mouse anti-Cytokeratin 5/KRT5 Antibody (M00398-6) at a dilution of 1:100. Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

Anti-Cytokeratin 5/KRT5 Antibody (Clone#5D3F7)

Catalog Number: M00398-6



IF analysis using anti- KRT5 Antibody (M00398-6). detected in paraffin-embedded section of human lung cancer tissue. The tissue section were stained using the DyLight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog # BA1126) and counterstained with DAPI (blue).



Flow Cytometry analysis of A431 cells using anti-Cytokeratin 5/KRT5 antibody (M00398-6).

Overlay histogram showing A431 cells stained with M00398-6 (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 mouse anti-Cytokeratin 5/KRT5 Antibody (M00398-6) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.