

## Basic Information

<b>Product Name</b>	Anti-Cytokeratin 8/KRT8 Antibody (Clone#3G9)	
<b>Gene Name</b>	KRT8	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG2b	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, IF, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human Cytokeratin 8 recombinant protein (Position: D107-K325). Human Cytokeratin 8 shares 95.4% and 94.5% amino acid (aa) sequence identity with mouse and rat Cytokeratin 8, respectively.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	protein G purified.	
<b>Observed MW</b>	54 kDa	
<b>Dilution Ratios</b>	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.	

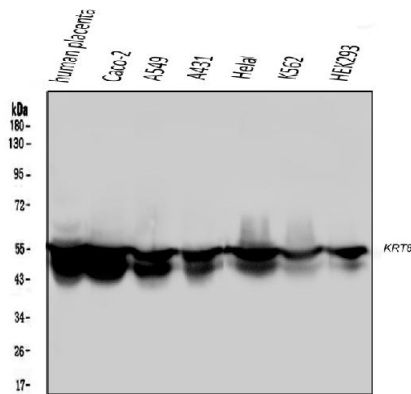
## Storage

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

## Background Information

Keratin, type II cytoskeletal 8, also known as Cytokeratin-8 (CK-8) or keratin-8 (K8) is a keratin protein that is encoded in humans by the KRT8 gene. This gene is a member of the type II keratin family clustered on the long arm of chromosome 12. Type I and type II keratins heteropolymerize to form intermediate-sized filaments in the cytoplasm of epithelial cells. The product of this gene typically dimerizes with keratin 18 to form an intermediate filament in simple single-layered epithelial cells. This protein plays a role in maintaining cellular structural integrity and also functions in signal transduction and cellular differentiation. Mutations in this gene cause cryptogenic cirrhosis. Alternatively spliced transcript variants have been found for this gene.

## Selected Validation Data



Western blot analysis of anti-Cytokeratin 8/KRT8 antibody (M01421-3).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: human Caco-2 whole cell lysates,

Lane 3: human A549 whole cell lysates,

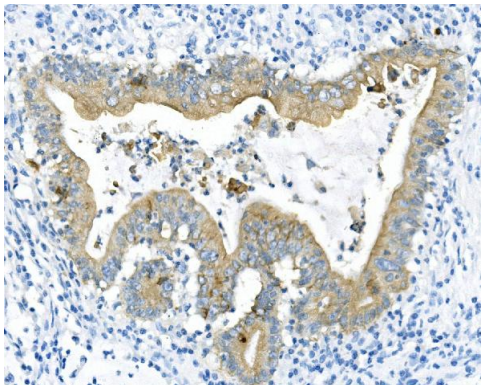
Lane 4: human A431 whole cell lysates,

Lane 5: human Hela whole cell lysates,

Lane 6: human K562 whole cell lysates,

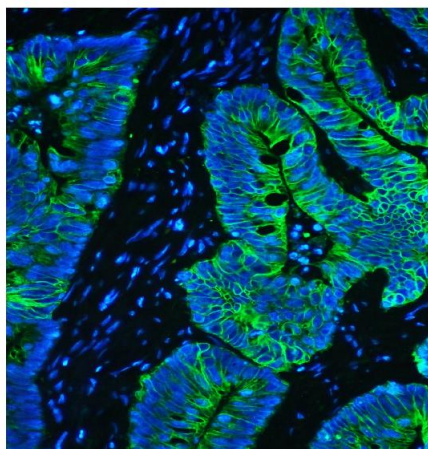
Lane 7: human HEK293 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Cytokeratin 8/KRT8 antigen affinity purified monoclonal antibody (M01421-3) 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 8/KRT8 at approximately 54 kDa. The expected band size for Cytokeratin 8/KRT8 is at 54 kDa.



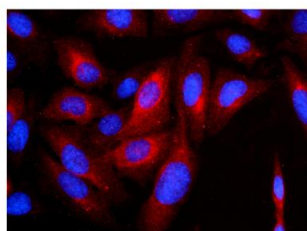
IHC analysis of Cytokeratin 8/KRT8 using anti-Cytokeratin 8/KRT8 antibody (M01421-3).

Cytokeratin 8/KRT8 was detected in a paraffin-embedded section of human rectal cancer tissue. The tissue section was incubated with mouse anti-Cytokeratin 8/KRT8 Antibody (M01421-3) at a dilution of 1:200 and developed using HRP Conjugated mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB (Catalog # AR1027) as the chromogen.



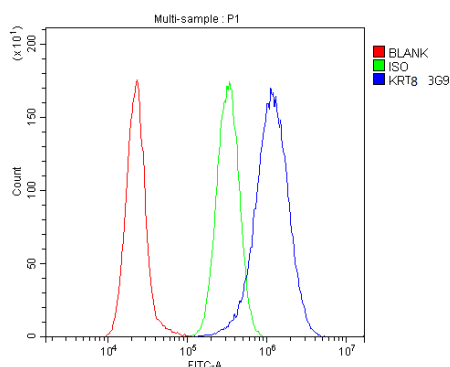
IF analysis of Cytokeratin 8/KRT8 using anti-Cytokeratin 8/KRT8 antibody (M01421-3).

Cytokeratin 8/KRT8 was detected in a paraffin-embedded section of human intestinal cancer tissue. Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



IF analysis of Cytokeratin 8/KRT8 using anti-Cytokeratin 8/KRT8 antibody (M01421-3).

Cytokeratin 8/KRT8 was detected in an immunocytochemical section of U2OS cells. Biotin Conjugated Goat anti-Mouse IgG (BA1001) was used as secondary antibody. The section was developed using Cy3 Conjugated Avidin (BA1037).



Flow Cytometry analysis of A549 cells using anti-Cytokeratin 8/KRT8 antibody (M01421-3).

Overlay histogram showing A549 cells stained with A04887-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Cytokeratin 8/KRT8 Antibody ((M01421-3, 1:100).

DyLight®488 conjugated goat anti-mouse IgG (BA1126, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was mouse IgG (Catalog # BA1046) (1:100) used under the same conditions.

Unlabelled sample (Red line) was also used as a control.