iFluor™ 594 Conjugated Anti-Cytokeratin 8 Antibody [SU0338]

HA720118F

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	IF-Cell, IF-Tissue, FC
Molecular Wt:	Predicted band size: 54 kDa
Clone number:	SU0338

Description: Cytokeratins comprise a diverse group of intermediate filament proteins (IFPs) that are expressed as pairs in both keratinized and non-keratinized epithelial tissue. Cytokeratins play a critical role in differentiation and tissue specialization and function to maintain the overall structural integrity of epithelial cells. They have been found to be useful markers of tissue differentiation, which is directly applicable to the characterization of malignant tumors. Cytokeratin 8 expression is seen in epithelium and epithelium-derived tumors. The Cytokeratin 8 and 18 pair are normally expressed in simple epithelia, but not in stratified epithelial cells. Research indicates that squamous cell carcinomas derived from stratified epithelia show abnormal expression of Cytokeratin 8 and 18, although it is not known whether these proteins contribute to the malignant phenotype of the cells. Expression of Cytokeratin 8 and 18 in oral squamous cell carcinomas is an independent prognostic marker that indicates a poor prognosis. Cytokeratin 8 expression correlates with malignancy in leukoplakia and carcinomas of the head and neck; it is expressed in all non-small-cell lung cancers. Cytokeratin 8 has been shown to possess extracellular epitopes on tumor cells, which may represent valuable targets for therapy.

Conjugate:	iFluor™ 594, Amax: 587nm; Emax: 603nm.
Immunogen:	Synthetic peptide within Human Cytokeratin 8 aa 321-370 / 483.
Positive control:	Human breast tissue, human liver tissue, SK-Br-3, A431.
Subcellular location:	Nucleoplasm, Nucleus matrix, Cytoplasm.
Database links:	SwissProt: P05787 Human | P11679 Mouse
Recommended Dilutions:	
IF-Cell	1:50
IF-Tissue	1:100-1:400
FC	1:500-1:1,000
Storage Buffer:	Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS.
Storage Instruction:	Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Images

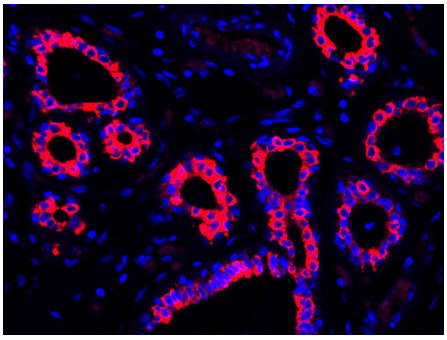

Fig1: Immunofluorescence analysis of paraffin-embedded human breast tissue labeling Cytokeratin 8 (HA720118F).

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. And then probed with the primary antibodies Cytokeratin 8 (HA720118F, red) at 1/400 dilution at +4℃ overnight, washed with PBS.

Nuclei were counterstained with DAPI (blue).

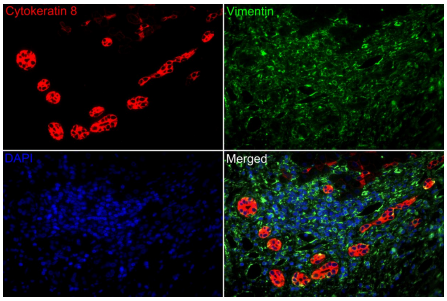

Fig2: Immunofluorescence analysis of paraffin-embedded human liver tissue labeling Cytokeratin 8 (HA720118F) and Vimentin (EM0401).

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. And then probed with the primary antibodies Cytokeratin 8 (HA720118F, red) at 1/100 dilution and Vimentin (EM0401, green) at 1/400 dilution at +4℃ overnight, washed with PBS.

Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) were used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

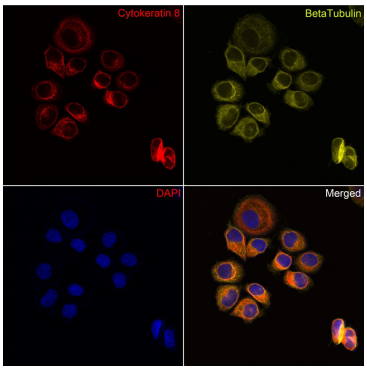

Fig3: Immunocytochemistry analysis of SK-Br-3 cells labeling Cytokeratin 8 (HA720118F).

Cells were fixed in methanol and then blocked with 2% negative goat serum for 15 minutes at room temperature. The cells were then incubated overnight at +4℃ with Cytokeratin 8 (HA720118F, red) at 1/50 dilution and Beta-tubulin (EM0103, yellow) at 1/400 dilution.

Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) were used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

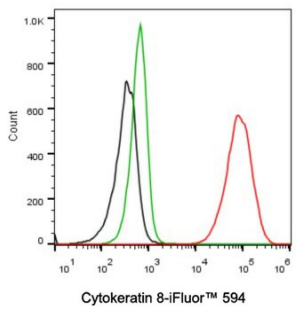

Fig4: Flow cytometric analysis of A431 cells labeling Cytokeratin 8.

Cells were fixed and permeabilized. Then incubated for 1 hour at +4℃ with Cytokeratin 8 (HA720118F, red, 1ug/ml) and Rabbit IgG Isotype Control (iFluor™ 488, green, 1ug/ml). Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Background References

1. Ruiz A et al. Effect of hydroxychloroquine and characterization of autophagy in a mouse model of endometriosis. Cell Death Dis 7:e2059 (2016).
2. Xiao, L. et al. Three-dimensional epithelial and mesenchymal cell co-cultures form early tooth epithelium invagination-like structures: expression patterns of relevant molecules. J. Cell. Biochem. 113: 1875-1885(2012).