iFluor™ 594 Conjugated Anti-Cytokeratin 16 Antibody [SC52-09]

HA720114F

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	IF-Cell, IF-Tissue
Molecular Wt:	Predicted band size: 51 kDa
Clone number:	SC52-09

Description: Cytokeratins comprise a diverse group of intermediate filament proteins that are expressed as pairs in both keratinized and non-keratinized epithelial tissue. The cytokeratin proteins play a critical role in differentiation, as well as tissue specialization and function, to maintain the overall structural integrity of epithelial cells. Cytokeratins are also useful markers in identifying the origin of metastatic tumors. Cytokeratin 16 is expressed in benign stratified squamous epithelium and squamous cell carcinoma of the head and neck, as well as luminal cells of mammary gland and sweat ducts. It is absent in noninvasive breast carcinomas and normal breast tissue. Mutations in the Cytokeratin 16 gene cause various diseases, including pachyonychia congenita type 1 (PC1), nonepidermolytic palmoplantar keratoderma (NEPPK) and unilateral palmoplantar verrucous nevus (UPVN).

Conjugate: iFluor™ 594, Amax: 587nm; Emax: 603nm.

Immunogen: Synthetic peptide within human Cytokeratin 16 aa 27-75.

Positive control: A431, human esophagus tissue, human skin tissue.

Subcellular location: Cytoskeleton, Nucleus.

Database links: SwissProt: P08779 Human

Recommended Dilutions:

IF-Cell	1:50
IF-Tissue	1:50

Storage Buffer: Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

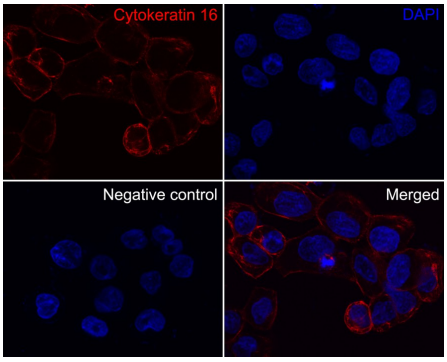

Fig1: Immunocytochemistry analysis of A431 cells labeling Cytokeratin 16.
Cells were fixed in methanol and then blocked with 2% negative goat serum for 15 minutes at room temperature. The cells were then incubated overnight at +4℃ with HA720114F at 1/50 dilution Rabbit monoclonal to Cytokeratin 16 (iFluor™ 594)(shown in red). DAPI was used as nuclear counterstain.

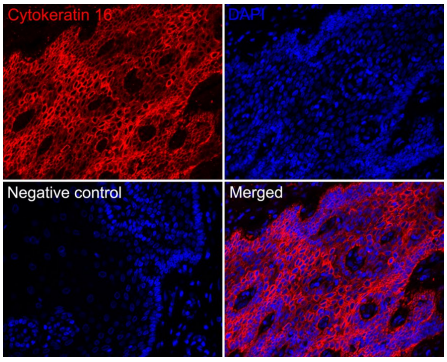

Fig2: Immunofluorescence analysis of paraffin-embedded human esophagus tissue labeling Cytokeratin 16.
The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. The section was then incubated overnight at +4℃ with HA720114F Cytokeratin 16 (iFluor™ 594, red) at 1/50 dilution, washed with PBS. DAPI was used as nuclear counterstain.

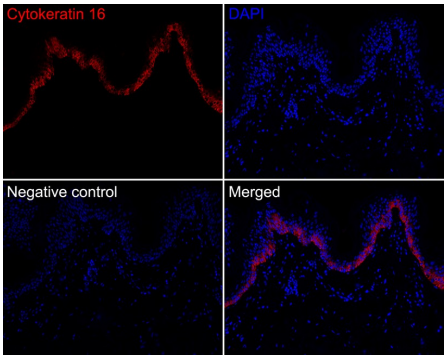

Fig3: Immunofluorescence analysis of paraffin-embedded human skin tissue labeling Cytokeratin 16.
The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. The section was then incubated overnight at +4℃ with HA720114F Cytokeratin 16 (iFluor™ 594, red) at 1/100 dilution, washed with PBS. DAPI was used as nuclear counterstain.

Background References

1. Pal SK. et. al. The expression profiles of acidic epithelial keratins in ameloblastoma. Oral Surg Oral Med Oral Pathol Oral Radiol 115:523-31 (2013).
2. Cheng CH. et. al. Keratin gene expression profiles after digit amputation in C57BL/6 vs. regenerative MRL mice imply an early regenerative keratinocyte activated-like state. Physiol Genomics 45:409-21 (2013).