

iFluor™ 647 Conjugated Anti-Cytokeratin 4 Antibody [SN74-03]

HA720142F



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	IF-Cell, IF-Tissue
Molecular Wt:	Predicted band size: 56 kDa
Clone number:	SN74-03

Description: Cytokeratins are a subfamily of intermediate filament keratins that are characterized by a remarkable biochemical diversity, which is represented in human epithelial tissues by at least 20 different polypeptides. Cytokeratins range in isoelectric range between 4.9 and 7.8. Cytokeratin 1 has the highest molecular weight, while Cytokeratin 19 has the lowest molecular weight. The cytokeratins are divided into the type I and type II subgroups. Type II family members comprise the basic to neutral members, Cytokeratins 1-8, while the type I group comprises the acidic members, Cytokeratins 9-20. Various epithelia in the human body usually express cytokeratins which are characteristic of the type of epithelium and related to the degree of maturation or differentiation within said epithelium. Cytokeratin subtype expression patterns are used to an increasing extent in the distinction of different types of epithelial malignancies. Cytokeratin 4 is expressed in differentiated layers of the mucosal and esophageal epithelia along with Cytokeratin 13.

Conjugate: iFluor™ 647, Ex: 656nm; Em: 670nm.

Immunogen: Recombinant protein within Human Cytokeratin 4 aa 395-520.

Positive control: A431, human tonsil tissue.

Subcellular location: Cell surface, intermediate filament cytoskeleton, nucleus.

Database links: SwissProt: P19013 Human

Recommended Dilutions:

IF-Cell	1:100
IF-Tissue	1:200

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.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

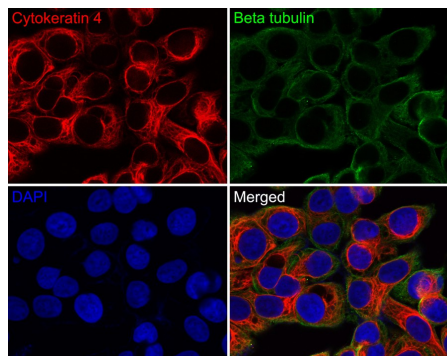


Fig1: Immunocytochemistry analysis of A431 cells labeling Cytokeratin 4 with Rabbit anti-Cytokeratin 4 antibody (HA720142F) at 1/100 dilution.

Cells were fixed in 100% methanol for 10 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 2% normal goat serum for 1 hour at 37°C. Cells were then incubated with Rabbit anti-Cytokeratin 4 antibody (HA720142F, red) at 1/100 dilution in 2% normal goat serum overnight at 4 °C. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, green) was stained at 1/200 dilution overnight at +4°C. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/800 dilution.

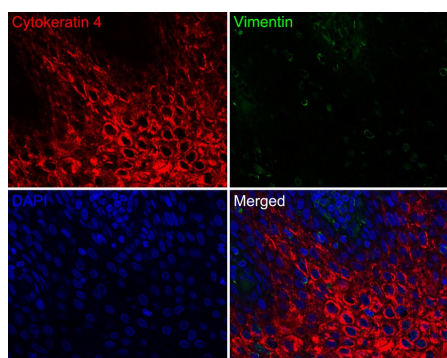


Fig2: Immunofluorescence analysis of paraffin-embedded human tonsil tissue labeling Cytokeratin 4 (HA720142F) and Vimentin (EM0401).

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 4 (HA720142F, red) at 1/200 dilution and Vimentin (EM0401, green) at 1/1,000 dilution overnight at 4 °C, washed with PBS.

iFluor™ 488 conjugate-Goat anti-Mouse IgG (HA1125) was used as the secondary antibody at 1/1,000 dilution. DAPI was used as nuclear counterstain.

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Jacot TA. et al. Development of a composite measure of product adherence, protocol compliance, and semen exposure using DNA and protein biomarkers for topical HIV prevention studies. PLoS One 9:e114368 (2014).
2. Badylak SF. et al. Esophageal preservation in five male patients after endoscopic inner-layer circumferential resection in the setting of superficial cancer: a regenerative medicine approach with a biologic scaffold. Tissue Eng Part A 17:1643-50 (2011).

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