## iFluor™ 594 Conjugated Anti-Cytokeratin 7 Antibody [ST50-05]

## **HA720120F**



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human, Mouse
Applications: IF-Cell, IF-Tissue

Molecular Wt: 51 kDa
Clone number: ST50-05

Description: Keratin, type II cytoskeletal 7 also known as cytokeratin-7 (CK-7) or keratin-7 (K7) or

sarcolectin (SCL) is a protein that in humans is encoded by the KRT7 gene. Keratin 7 is a type II keratin. It is specifically expressed in the simple epithelia lining the cavities of the internal organs and in the gland ducts and blood vessels. Keratin-7 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 simple epithelia lining the cavities of the internal organs and in the gland ducts and blood vessels. The genes encoding the type II cytokeratins are clustered in a region of chromosome 12q12-q13. Alternative splicing may result in several transcript variants; however, not all

variants have been fully described.

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

**Immunogen:** Synthetic peptide within Human Cytokeratin 7 aa 18-67.

**Positive control:** Human breast tissue, human liver tissue, SK-Br-3.

Subcellular location: Cytoplasm.

Database links: SwissProt: P08729 Human | Q9DCV7 Mouse

**Recommended Dilutions:** 

**IF-Cell** 1:100

**IF-Tissue** 1:200-1:500

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

**Storage Instruction:** Store at  $+4^{\circ}$ C after thawing. Aliquot store at  $-20^{\circ}$ C. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

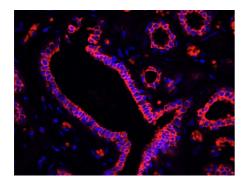
# Hangzhou Huaan Biotechnology Co., Ltd.



Service mail:support@huabio.cn



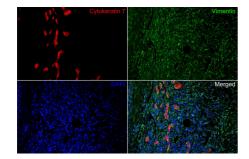
#### **Images**



**Fig1:** Immunofluorescence analysis of paraffin-embedded human breast tissue labeling Cytokeratin 7 (HA720120F).

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 7 (HA720120F, red) at 1/200 dilution at  $+4^{\circ}$ C overnight, washed with PBS.

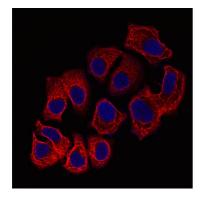
Nuclei were counterstained with DAPI (blue).



**Fig2:** Immunofluorescence analysis of paraffin-embedded human liver tissue labeling Cytokeratin 7 (HA720120F) 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 7 (HA720120F, red) at 1/200 dilution and Vimentin (EM0401, green) at 1/500 dilution at +4°C 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 SKBR3 cells labeling Cytokeratin 7 (HA720120F).

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 $^{\circ}$ C with Cytokeratin 7 (HA720120F, red) at 1/100 dilution. Nuclei were counterstained with DAPI (blue).

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

### **Background References**

- 1. Hrudka J. et al. Cytokeratin 7 expression as a predictor of an unfavorable prognosis in colorectal carcinoma. Sci Rep. 2021 Sep
- 2. Statz E. et al. Cytokeratin 7, GATA3, and SOX-10 is a Comprehensive Panel in Diagnosing Triple Negative Breast Cancer Brain Metastases. Int J Surg Pathol. 2021 Aug