### iFluor™ 594 Conjugated Anti-Cytokeratin 14 Antibody [SC65-06]

## **HA720117F**



Species reactivity: Rat, Human, Mouse

Applications: IF-Tissue

Molecular Wt: Predicted band size: 52 kDa

Clone number: SC65-06

**Description:** This gene encodes a member of the keratin family, the most diverse group of intermediate

filaments. This gene product, a type I keratin, is usually found as a heterotetramer with two keratin 5 molecules, a type II keratin. Together they form the cytoskeleton of epithelial cells. Mutations in the genes for these keratins are associated with epidermolysis bullosa simplex. The nonhelical tail domain is involved in promoting KRT5-KRT14 filaments to self-organize into large bundles and enhances the mechanical properties involved in resilience of keratin intermediate filaments in vitro. Expressed in the corneal epithelium (at protein level). Detected in the basal layer, lowered within the more apically located layers specifically in the stratum spinosum, stratum granulosum but is not detected in stratum corneum. Strongly expressed in the outer root sheath of anagen follicles but not in the germinative matrix, inner root sheath or hair. A form of epidermolysis bullosa simplex, a group of skin fragility disorders characterized by skin blistering due to cleavage within the basal layer of keratinocytes, and erosions caused by minor mechanical trauma. There is a broad spectrum of clinical severity ranging from minor blistering on the feet, to subtypes with extracutaneous involvement and a lethal outcome. EBS1A is an autosomal dominant form characterized by generalized intraepidermal skin blistering that begins and is very prominent at birth. EBS1A may be life-threatening in the first year of life. Tendency to blistering diminishes in

adolescence.

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

Immunogen: Recombinant protein within Human Cytokeratin 14 aa 250-484.

Positive control: Rat skin tissue.

**Subcellular location:** Cytoplasm, Nucleus.

**Database links:** SwissProt: P02533 Human | Q61781 Mouse | Q6IFV1 Rat

**Recommended Dilutions:** 

**IF-Tissue** 1:100-1:500

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 °C long term.

**Purity:** Protein A affinity purified.

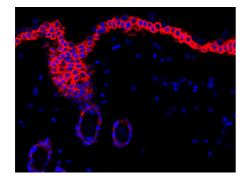
# Hangzhou Huaan Biotechnology Co., Ltd.



Service mail:support@huabio.cn



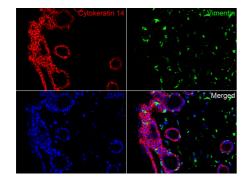
### **Images**



**Fig1:** Immunofluorescence analysis of paraffin-embedded rat skin tissue labeling Cytokeratin 14 (HA720117F).

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 14 (HA720117F, 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 rat skin tissue labeling Cytokeratin 14 (HA720117F) 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 14 (HA720117F, red) at 1/100 dilution and Vimentin (EM0401, green) at 1/400 dilution at  $+4^{\circ}$ C overnight, washed with PBS.

Goat Anti-Mouse IgG H&L (iFluor  $^{\text{TM}}$  488, HA1125) were used as the secondary antibody at 1/1,000 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. Pastar I et al. Interactions of methicillin resistant Staphylococcus aureus USA300 and Pseudomonas aeruginosa in polymicrobial wound infection. PLoS One 8:e56846 (2013).
- 2. DeWard AD et al. Cellular heterogeneity in the mouse esophagus implicates the presence of a nonquiescent epithelial stem cell population. Cell Rep 9:701-11 (2014).

