

**Cytokeratin (Pan) Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1116a****Specification**

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**Cytokeratin (Pan) Antibody - Product Information**

Application	WB, IHC, ICC, E
Primary Accession	<a href="#">P13647</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

**Description**

Biochemically, most members of the CK family fall into one of two classes, type I (acidic polypeptides) and type II (basic polypeptides). 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. 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. Cytokeratins have been found to be useful markers of tissue differentiation which is directly applicable to the characterization of malignant tumors.

**Immunogen**

Purified recombinant fragment of CK5 expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**Cytokeratin (Pan) Antibody - Additional Information**

**Gene ID** 3852

**Other Names**

Keratin, type II cytoskeletal 5, 58 kDa cytokeratin, Cytokeratin-5, CK-5, Keratin-5, K5, Type-II keratin Kb5, KRT5

**Dilution**

WB~~1/500 - 1/2000

IHC~~1/500 - 1/2000

ICC~~N/A

E~~N/A

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Cytokeratin (Pan) Antibody is for research use only and not for use in diagnostic or therapeutic

procedures.

## Cytokeratin (Pan) Antibody - Protein Information

**Name** KRT5

### Function

Required for the formation of keratin intermediate filaments in the basal epidermis and maintenance of the skin barrier in response to mechanical stress (By similarity). Regulates the recruitment of Langerhans cells to the epidermis, potentially by modulation of the abundance of macrophage chemotactic cytokines, macrophage inflammatory cytokines and CTNND1 localization in keratinocytes (By similarity).

### Cellular Location

Cytoplasm.

### Tissue Location

Expressed in corneal epithelium (at protein level) (PubMed:26758872). Expressed in keratinocytes (at protein level) (PubMed:20128788, PubMed:31302245).

## Cytokeratin (Pan) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Cytokeratin (Pan) Antibody - Images

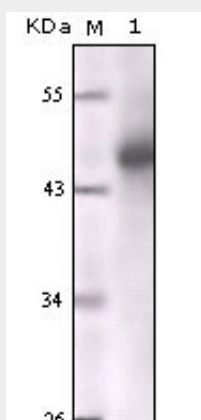


Figure 1: Western blot analysis using CK mouse mAb against truncated CK5 recombinant protein.

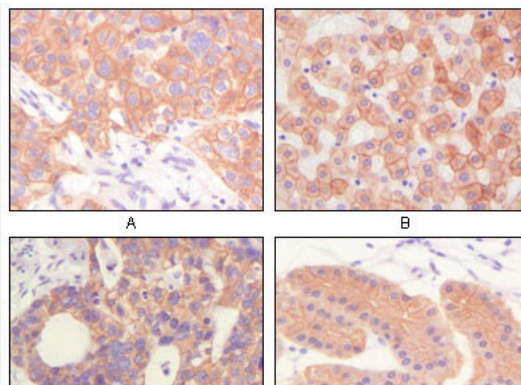


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung squamous cell carcinoma (A), normal hepatocyte (B), colon adenocarcinoma, normal stomach tissue (D), showing cytoplasmic and membrane localization using CK mouse mAb with DAB staining.

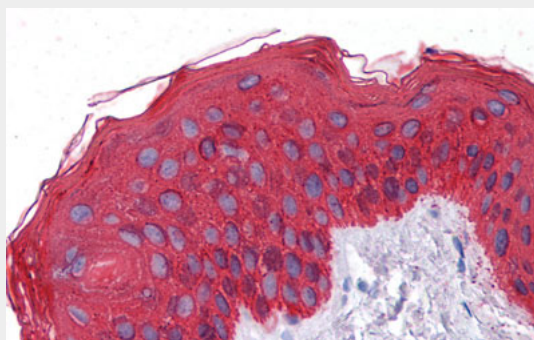


Figure 3: Immunohistochemical analysis of paraffin-embedded human Skin tissues using CK mouse mAb

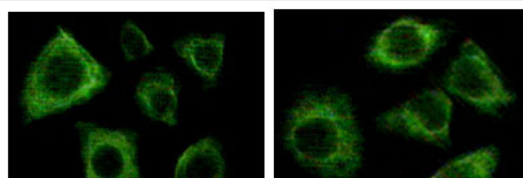


Figure 4: Immunofluorescence staining of methanol-fixed Eca-109 (left) and HepG2 (right) cells showing cytoplasmic localization.

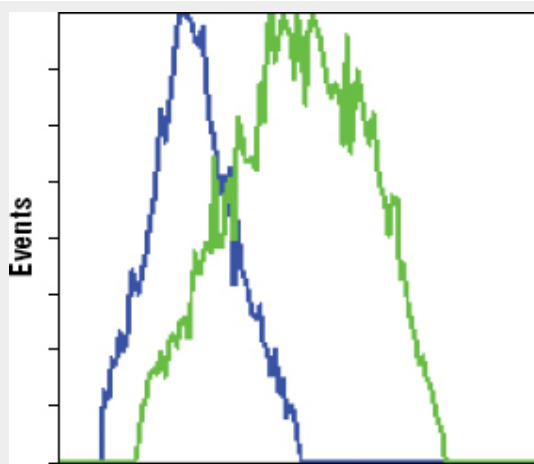


Figure 4: Flow cytometric analysis of HCC827 cells, untransfected (blue) or transfected with GFP (green), using GFP mouse mAb .

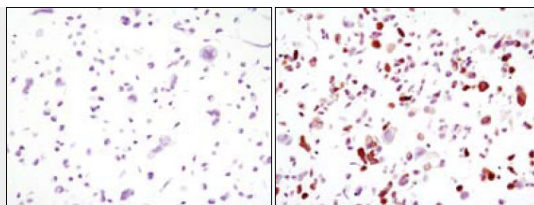


Figure 3: Immunocytochemistry analysis of HCC827 cells, untransfected(left) or transfected with GFP(right) using anti-GFP monoclonal antibody.

#### **Cytokeratin (Pan) Antibody - References**

1. Scope A. Schwendenwein I. Frommlet F. Vet Rec. 2006, Dec 16, 159(25): 839-43.
2. Somjen D. Katzburg S. Posner GH. et al. J Cell Biochem. 2007, Apr 15, 100(6): 1406-14.