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

Specification

Cytokeratin (Pan) Antibody - Product Information

Application	**WB, IHC, IF, FC**
Primary Accession	P13647
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
IF~~1/200 - 1/1000
FC~~1:200~~400

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 Cytomety
- Cell Culture

Cytokeratin (Pan) Antibody - Images

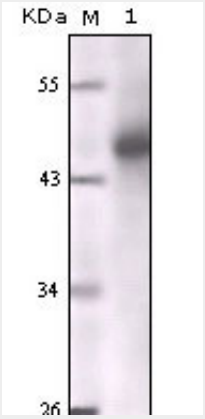


Figure 1: Western blot analysis using CK mouse mAb against truncated CK5 recombinant protein.

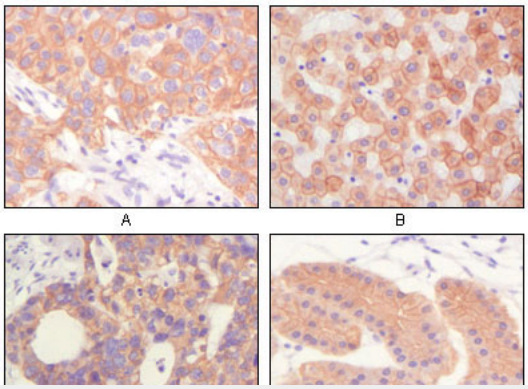


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung squamous cell carcinoma (A),normal hepatocyte (B), colon adenocacinoma?, normal stomach tissue (D), showing cytoplasmic and membrane localization using CK mouse mAb with DAB staining.

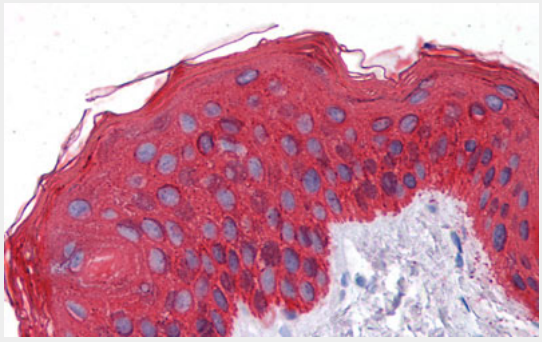


Figure 3: Immunohistochemical analysis of paraffin-embedded human Skin tissues using CK mouse mAb

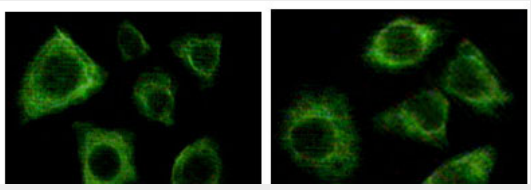


Figure 4: Immunofluorescence staining of methanol-fixed Eca-109 (left) and HepG2 (right) cells showing cytoplasmic localization.

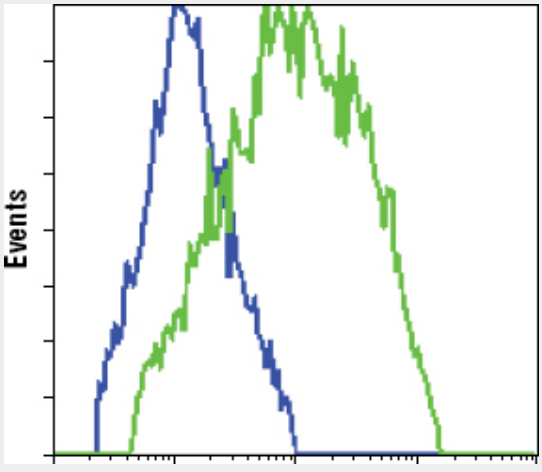


Figure 4: Flow cytometric analysis of HCC827 cells, untransfected (blue) or transfected with GFP (green), using GFP mouse mAb .

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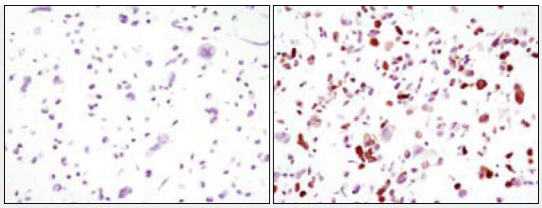


Figure 3: Immunocytochemistry analysis of HCC827 cells, untransfected(left) or transfected with GFP(right) using anti-GFP monoclonal antibody.

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.