

Cytokeratin(Pan) Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1276a

Specification

Cytokeratin(Pan) Antibody - Product Information

Application IHC, ICC, E
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 Cytokeratin 5 expressed in E. Coli.

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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

IHC~~1/200 - 1/1000 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 Cytomety
- Cell Culture

Cytokeratin(Pan) Antibody - Images

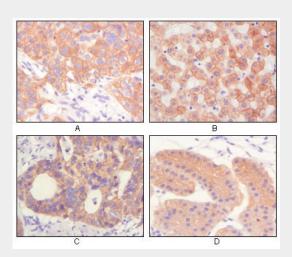


Figure 1: Immunohistochemical analysis of paraffin-embedded human lung squamous cell carcinoma (A),normal hepatocyte (B), colon adenocacinoma, normal stomach tissue (D), showing cytoplasmic and membrane localization using CK mouse mAb with DAB staining.



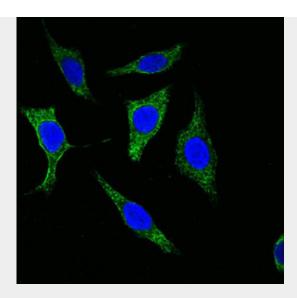


Figure 2: Confocal immunofluorescence analysis of methanol-fixed Eca-109 cells using Cytokeratin (Pan) mouse mAb (green), showing cytoplasmic localization. Blue: DRAQ5 fluorescent DNA dye.

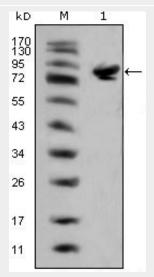


Figure 1: Western blot analysis using ISL1 mouse mAb against full-length ISL1 (aa1-349)-hlgGFc transfected HEK293 cell lysate(1).

Cytokeratin(Pan) Antibody - References

1. Vet Rec. 2006, Dec 16, 159(25): 839-43. 2. J Cell Biochem. 2007, Apr 15, 100(6): 1406-14.