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Cytokeratin(Pan) Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1276a

Product Information

Application	IHC, ICC, E
Primary Accession	P13647
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7H8
Isotype	IgG1
Calculated MW	62378
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.
Formulation	Ascitic fluid containing 0.03% sodium azide.

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.

Protein Information

Name	KRT5 (HGNC:6442)
Function	Structural component of intermediate filaments in basal keratinocytes of stratified epithelia. Forms heteropolymers with type I partners including KRT14 and KRT15, contributing to the formation of the keratin intermediate filament network that provides mechanical stability and resilience to the basal layer of the epidermis (PubMed:1372711, PubMed:1694855). 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).

References

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

Images

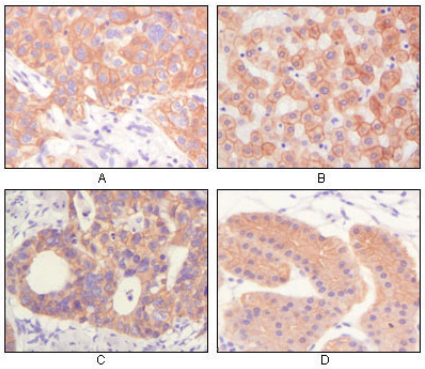


Figure 1: Immunohistochemical analysis of paraffin-embedded human lung squamous cell carcinoma (A),normal hepatocyte (B), colon adenocacinoma, normal stomach tissue (D), showing cytoplasmic and membrane localization using CK mouse mAb with DAB staining.

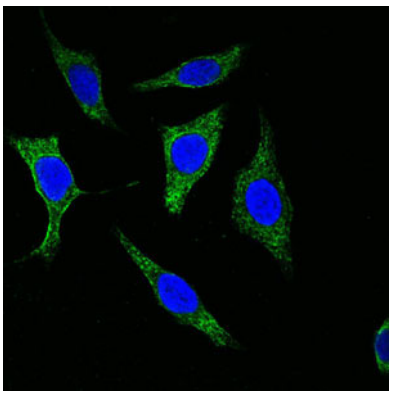
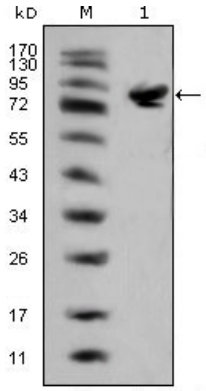


Figure 2: Confocal immunofluorescence analysis of methanol-fixed Eca-109 cells using Cytokeratin (Pan) mouse mAb (green), showing cytoplasmic localization. Blue: DRAQ5 fluorescent DNA dye.

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



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