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Cytokeratin 8 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1229a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	P05787
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8A5D12
Isotype	IgG1
Calculated MW	53704
Description	Cytokeratin 8, also known as CK8, KRT8, K8. Entrez Protein NP_002264. It is a member of the type II keratin family.Type I and type II keratins heteropolymerize to form intermediate-sized filaments in the cytoplasm of epithelial cells.It typically dimerizes with keratin 18 to form an intermediate filament in simple single-layered epithelial cells. This protein plays a role in maintaining cellular structural integrity and also functions in signal transduction and cellular differentiation. Mutations in this gene cause cryptogenic cirrhosis.
Immunogen	Purified recombinant fragment of human Cytokeratin (aa391-483) expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	3856
Other Names	Keratin, type II cytoskeletal 8, Cytokeratin-8, CK-8, Keratin-8, K8, Type-II keratin Kb8, KRT8, CYK8
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 8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRT8 (HGNC:6446)

Synonyms	CYK8
Function	Structural component of intermediate filaments in simple epithelial cells. Together with its obligate type I partner KRT18, contributes to the formation of the keratin intermediate filament network that provides mechanical stability and resilience to epithelial cells (PubMed:26823019). Also involved in maintaining epithelial integrity and protecting cells from non-mechanical stress, such as apoptosis (By similarity). Also required for ARHGEF40-mediated actin stress fiber formation and tensional force-induced stress fiber formation and reinforcement (PubMed:26823019). In striated muscle, together with KRT19, may contribute to linking the contractile apparatus to dystrophin at the costameres (PubMed:16000376).
Cellular Location	Cytoplasm. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:Q10758}. Nucleus matrix {ECO:0000250|UniProtKB:Q10758}. Cytoplasm, cytoskeleton
Tissue Location	Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma membrane in structures that contain dystrophin and spectrin. Expressed in gingival mucosa and hard palate of the oral cavity.

References

1. Cancer Genet Cytogenet. 2007 Oct 15;178(2):94-103. 2. Cancer Lett. 2008 Jul 8;265(2):188-96.

Images

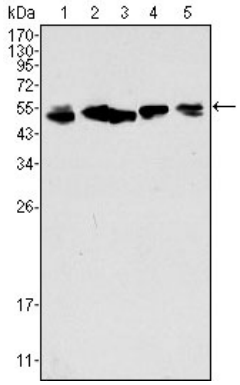


Figure 1: Western blot analysis using CK8 mouse mAb against A549 (1), Hela (2), MCF-7 (3), A431 (4) and HepG2 (5) cell lysate.

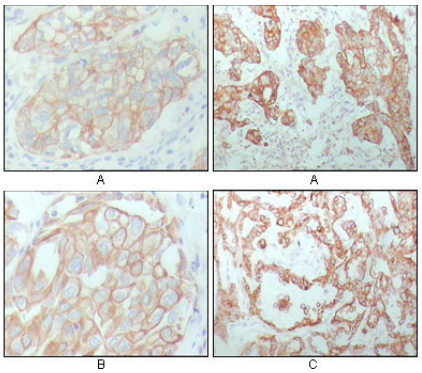
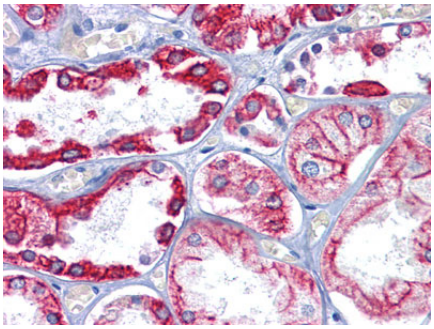


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma (A), lung cancer (B) and ovarian cancer tissue (C), showing membrane and cytoplasmic localization with DAB staining using CK8 mouse mAb.

Figure 3: Immunohistochemical analysis of paraffin-embedded human Kidney tissues using CK8 mouse mAb



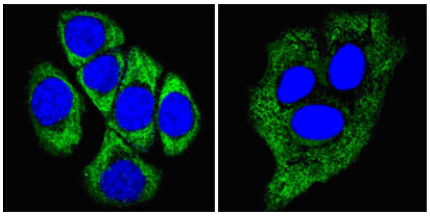


Figure 4: Confocal immunofluorescence analysis of methanol-fixed ECA109 cells (left) and HepG2 cells (right) using CK8 mouse mAb (green), showing cytoplasmic localization. Blue: DRAQ5 fluorescent DNA dye.

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