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CK1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1069a

Product Information

Application	WB, IHC, E
Primary Accession	P04264
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3C10F7; 3C10G5; PMC01; 4D12B3; 3C10F7C11
Isotype	IgG1
Calculated MW	66039
Description	CK1 (also designated Cytokeratin 1 or KRT1),with 644-amino acid protein (about 70kDa), is a member of the keratin family. Cytokeratins play a critical role in differentiation and tissue specialization, and they function to maintain the overall structural integrity of epithelial cells.CK1 consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. CK1 is specifically expressed in the spinous and granular layers of the epidermis with family member KRT10 and mutations in these genes have been associated with bullous congenital ichthyosiform erythroderma.
Immunogen	Purified recombinant fragment of CK1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	3848
Other Names	Keratin, type II cytoskeletal 1, 67 kDa cytokeratin, Cytokeratin-1, CK-1, Hair alpha protein, Keratin-1, K1, Type-II keratin Kb1, KRT1, KRTA
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 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	CK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRT1 (HGNC:6412)

Synonyms	KRTA
Function	Structural component of intermediate filaments in suprabasal keratinocytes of stratified epithelia. Forms heteropolymers with a type I keratin, assembling into keratin intermediate filament networks that provide mechanical strength and structural stability to differentiating epidermal cells (PubMed:1381288). May regulate the activity of kinases such as PKC and SRC by interacting with integrin beta-1 (ITB1) and the receptor of activated protein C kinase 1 (RACK1) (PubMed:17956333, PubMed:21544310). In complex with C1QBP, acts as a high-affinity receptor for kininogen-1 (HMWK) (PubMed:21544310).
Cellular Location	Cell membrane. Cytoplasm
Tissue Location	The source of this protein is neonatal foreskin. The 67-kDa type II keratins are expressed in terminally differentiating epidermis

References

1. Ricardo G. Espinola, Robin A. Pixley, Berhane Ghebrehiwet. Blood (ASH Annual Meeting Abstracts), Nov 2005; 106: 2666.

Images

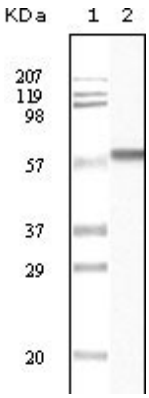


Figure 1: Western blot analysis using CK1 mouse mAb against truncated CK1 recombinant protein.

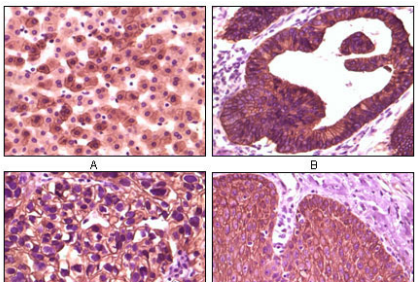


Figure 2: Immunohistochemical analysis of paraffin-embedded human liver tissue (A), colon carcinoma (B), lung carcinoma (C) and esophagus tissue (D), showing membrane localization using CK1 mouse mAb with DAB staining.

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