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CK18 antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AD80526

Product Information

Application	IHC
Primary Accession	P05783
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	261O3V2
Calculated MW	48058

Additional Information

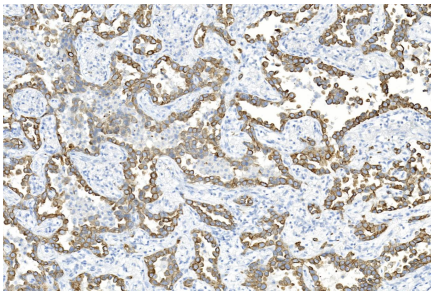
Gene ID	3875
Other Names	Keratin, type I cytoskeletal 18, Cell proliferation-inducing gene 46 protein, Cytokeratin-18, CK-18, Keratin-18, K18, KRT18, CYK18
Dilution	IHC~~1:100~500
Storage	Maintain refrigerated at 2-8°C.

Protein Information

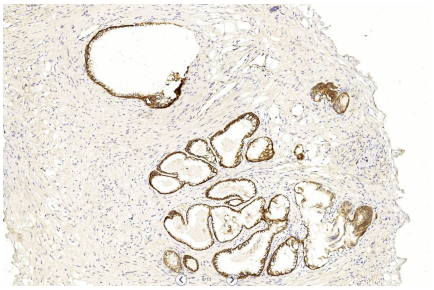
Name	KRT18 (HGNC:6430)
Synonyms	CYK18
Function	Structural component of intermediate filaments in simple epithelial cells. Forms intermediate filaments by heterodimerizing with the type II keratin KRT8, providing mechanical stability and resilience to epithelial cells (PubMed:15529338, PubMed:26823019). Involved in ARHGEF40-mediated actin stress fiber formation and tensional force- induced stress fiber formation and reinforcement (PubMed:26823019). Integrates into the intermediate filament network of skeletal muscle fibers alongside desmin and KRT19, contributing to force transmission (By similarity). Organization and orientation of KRT8/KRT18 filaments are responsible for the properly elongated morphology of epithelial tubules (By similarity). Also acts downstream of ROCK kinase activation as part of a positive feedback mechanism in response to cellular mechanical stress loading (PubMed:26823019). Involved in the uptake of thrombin-antithrombin complexes by hepatic cells (By similarity). When phosphorylated, plays a role in filament reorganization (PubMed:7523419, PubMed:8522591, PubMed:9298992, PubMed:9524113). Involved in the delivery of mutated CFTR to the plasma membrane (PubMed:15529338, PubMed:16424149). Involved in interleukin-6 (IL-6)- mediated barrier protection

	(PubMed:17213200).
Cellular Location	Nucleus matrix {ECO:0000250|UniProtKB:Q5BJY9}. Cytoplasm, perinuclear region. Nucleus, nucleolus. Cytoplasm {ECO:0000250|UniProtKB:Q5BJY9}
Tissue Location	Expressed in colon, placenta, liver and very weakly in exocervix. Increased expression observed in lymph nodes of breast carcinoma.

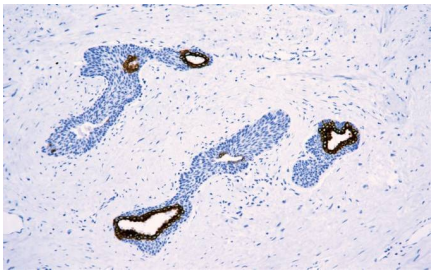
Images



Immunohistochemical analysis of formalin-fixed and paraffin-embedded human lung adenocarcinoma tissue was performed with CK18 primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.



Immunohistochemical analysis of formalin-fixed and paraffin-embedded human benign prostatic hyperplasia tissue was performed with CK18 primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.



Immunohistochemical analysis of formalin-fixed and paraffin-embedded human prostatic adenocarcinoma tissue was performed with CK18 primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.

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