

Anti-Cytokeratin Peptide 18 Antibody (Monoclonal, CY-90)

Catalog # ABO10420

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	Q5BJY9
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human, Rat
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for Cytokeratin Peptide 18, keratin 18 (KRT18) detection. Tested with WB, IHC-P, IHC-F in Human; rat. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Gene ID	294853
Other Names	Keratin, type I cytoskeletal 18, Cytokeratin-18, CK-18, Keratin-18, K18, Krt18 {ECO:0000250 UniProtKB:P05783}
Calculated MW	47761
Application Details	Immunohistochemistry(Paraffin-embedded Section), 1-2 μ g/ml, Human, rat, By Heat Immunohistochemistry(Frozen Section), 0.5-2 μ g/ml, Human, rat, - Western blot, 0.5-1 μ g/ml, Human, rat
Subcellular Localization	Nucleus matrix . Nucleus, nucleolus . Cytoplasm .
Tissue Specificity	Expressed on the plasma membrane of hepatocytes and in the narrow apical portions of supporting cells in the vomeronasal sensory epithelium. Detected in the type III alveolar cells of the lung, in the proliferative crypt epithelium of the small intestine and in the older intragemmal cells of the tongue. .
Source	Eukaryota
Protein Name	Keratin, type I cytoskeletal 18
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.

Clone Names	CY-90
Immunogen	The human epidermal carcinoma A-431 and MCF-7 human breast cancer cell lines.
Purification	Ascites
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the intermediate filament family.

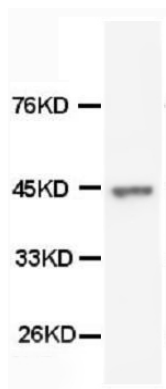
Protein Information

Name	Krt18 {ECO:0000250 UniProtKB:P05783}
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: 1691189). Involved in ARHGEF40-mediated actin stress fiber formation and tensional force-induced stress fiber formation and reinforcement (By similarity). Integrates into the intermediate filament network of skeletal muscle fibers alongside desmin and KRT19, contributing to force transmission (By similarity). Organization and orientation of 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 (By similarity). Involved in the uptake of thrombin-antithrombin complexes by hepatic cells (PubMed: 9353322). When phosphorylated, plays a role in filament reorganization. Involved in the delivery of mutated CFTR to the plasma membrane (By similarity). Together with KRT8, is involved in interleukin-6 (IL-6)-mediated barrier protection (By similarity).
Cellular Location	Nucleus matrix. Cytoplasm, perinuclear region {ECO:0000250 UniProtKB:P05783}. Nucleus, nucleolus {ECO:0000250 UniProtKB:P05783}. Cytoplasm
Tissue Location	Expressed on the plasma membrane of hepatocytes and in the narrow apical portions of supporting cells in the vomeronasal sensory epithelium. Detected in the type III alveolar cells of the lung, in the proliferative crypt epithelium of the small intestine and in the older intragemmal cells of the tongue

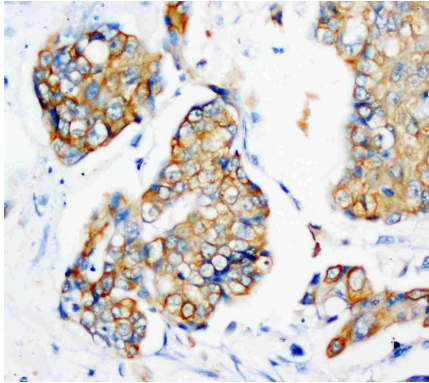
Background

Intermediate filaments(IFs) are a structurally related family of cellular proteins that appear to be intimately involved with the cytoskeleton. Human keratin 18(KRT18) and the homologous mouse Endo B are type I IF protein subunits whose expression is restricted in adults to a variety of simple epithelial tissues. The KRT18 gene is 3,791 bp long and the keratin 18 protein is coded for by 7 exons. The K18 gene is 3791 bp in length and the K18 protein is coded for by seven exons. By Southern blotting using the genomic DNA PCR product, the gene for keratin 18 is assigned to chromosome 12. Mutation of human keratin 18 in association with cryptogenic cirrhosis.

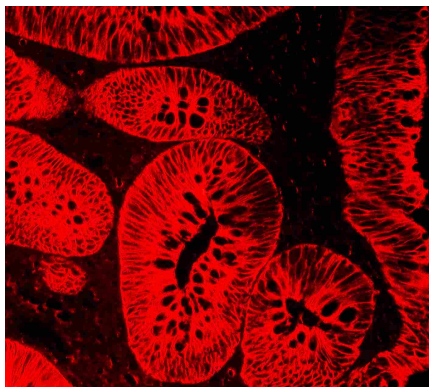
Images



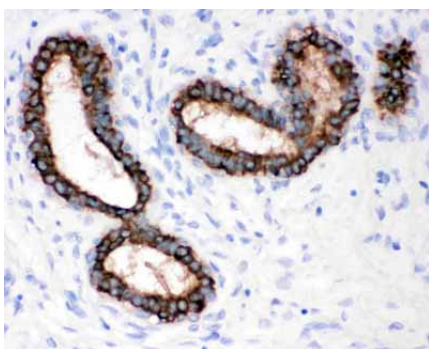
Anti-Cytokeratin Peptide 18 antibody (monoclonal),
ABO10420, Western blottingWB: MCF-7 Cell Lysate



Anti-Cytokeratin Peptide 18 antibody (monoclonal),
ABO10420, IHC(P)IHC(P): Human Mammary Cancer
Tissue



Anti-Cytokeratin Peptide 18 antibody (monoclonal),
ABO10420, IHC(P)IHC(P): Human Rectal Cancer Tissue



Anti-Cytokeratin Peptide 18 antibody (monoclonal),
ABO10420, IHC(P)IHC(P): Human Mammary Cancer
Tissue

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