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Cytokeratin 18 Antibody

Rabbit mAb
Catalog # AP90095

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P05783
Reactivity	Human
Clonality	Monoclonal
Other Names	Keratin-18; CYK18; cytokeratin 18; Cytokeratin-18; K18; K1C18; keratin 18; KRT18; CK-18;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	48058

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Cytokeratin 18
Description	K18 a type I cytoskeletal keratin. The keratins are intermediate filament proteins responsible for the structural integrity of epithelial cells and are subdivided into cytokeratins and hair keratins. Keratin 18 and its filament partner keratin 8 are perhaps the most commonly found members of the intermediate filament gene family.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

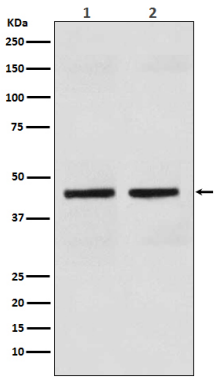
Cellular Location

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



Western blot analysis of Cytokeratin 18 expression in (1) HT-29 cell lysate;(2) human kidney lysate.

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Immunofluorescent analysis of HACAT cells, using Cytokeratin 18 Antibody .

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