10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Cytokeratin 18 Picoband Antibody

Catalog # ABO10178

Product Information

Application	WB, IHC-P
Primary Accession	P05783
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Keratin, type I cytoskeletal 18(KRT18) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	48058
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm, perinuclear region. Nucleus, nucleolus.
Tissue Specificity	Expressed in colon, placenta, liver and very weakly in exocervix. Increased expression observed in lymph nodes of breast carcinoma. .
Source	Eukaryota
Protein Name	Keratin, type I cytoskeletal 18
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human Cytokeratin 18 recombinant protein (Position: E204-H430). Human Cytokeratin 18 shares 87.7% and 85.9% amino acid (aa) sequence identity with mouse and rat Cytokeratin 18, respectively.
Purification	Immunogen affinity purified.
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.

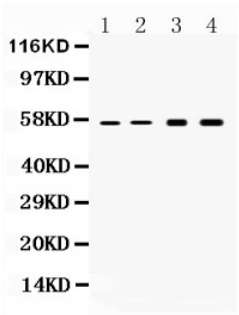
Protein Information

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.

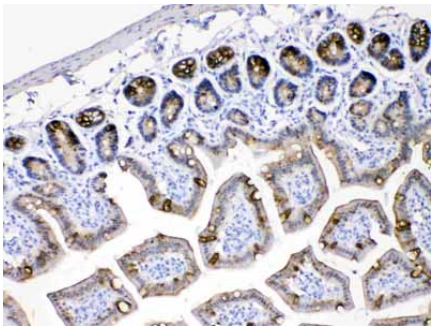
Background

Keratin 18, mapped to 12q13.13, is a type I cytokeratin. It is, together with its filament partner keratin 8, perhaps the most commonly found products of the intermediate filament gene family. They are expressed in single layer epithelial tissues of the body. Mutations in this gene have been linked to cryptogenic cirrhosis. Two transcript variants encoding the same protein have been found for this gene.

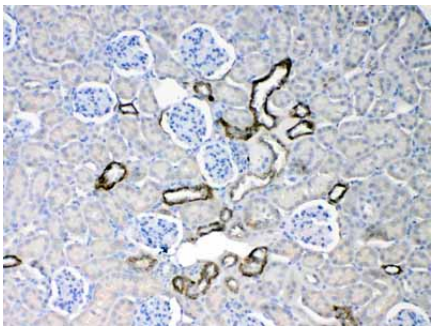
Images



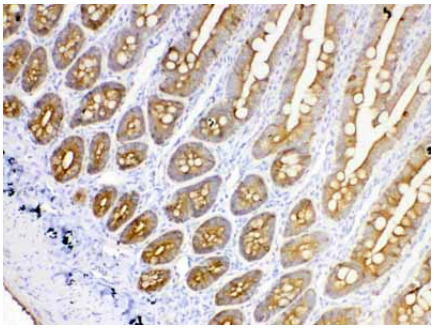
Western blot analysis of Cytokeratin 18 expression in rat liver extract (lane 1), mouse liver extract (lane 2), HELA whole cell lysates (lane 3) and HEPG2 whole cell lysates (lane 4). Cytokeratin 18 at 55KD was detected using rabbit anti- Cytokeratin 18 Antigen Affinity purified polyclonal antibody (Catalog # ABO10178) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .



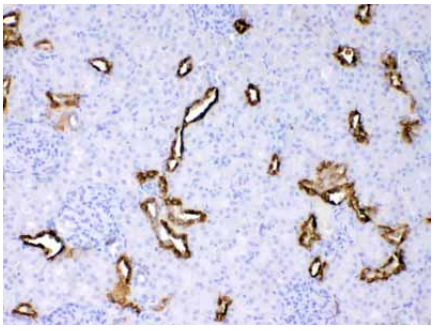
Cytokeratin 18 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti-Cytokeratin 18 Antigen Affinity purified polyclonal antibody (Catalog # ABO10178) at 1 μg/mL. The immunohistochemical section was developed using SABC method .



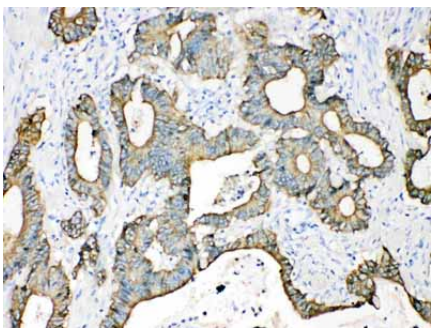
Cytokeratin 18 was detected in paraffin-embedded sections of mouse kidney tissues using rabbit anti-Cytokeratin 18 Antigen Affinity purified polyclonal antibody (Catalog # ABO10178) at 1 μg/mL. The immunohistochemical section was developed using SABC method .



Cytokeratin 18 was detected in paraffin-embedded sections of rat intestine tissues using rabbit anti-Cytokeratin 18 Antigen Affinity purified polyclonal antibody (Catalog # ABO10178) at 1 μg/mL. The immunohistochemical section was developed using SABC method .

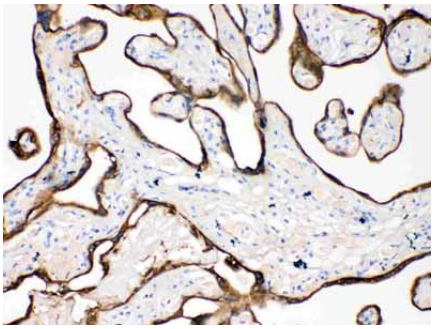


Cytokeratin 18 was detected in paraffin-embedded sections of rat kidney tissues using rabbit anti-Cytokeratin 18 Antigen Affinity purified polyclonal antibody (Catalog # ABO10178) at 1 μg/mL. The immunohistochemical section was developed using SABC method .



Cytokeratin 18 was detected in paraffin-embedded sections of human intetsinal cancer tissues using rabbit anti- Cytokeratin 18 Antigen Affinity purified polyclonal antibody (Catalog # ABO10178) at 1 μg/mL. The immunohistochemical section was developed using SABC method .

Cytokeratin 18 was detected in paraffin-embedded sections of human placenta tissues using rabbit anti-Cytokeratin 18 Antigen Affinity purified polyclonal antibody (Catalog # ABO10178) at 1 μg/mL. The immunohistochemical section was developed using SABC



method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.