

CYK18 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7376b

Product Information

Application	WB, FC, IF, IHC-P, E
Primary Accession	P05783
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18746
Calculated MW	48058
Antigen Region	401-430

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
Target/Specificity	This CYK18 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 401-430 amino acids from the C-terminal region of human CYK18.
Dilution	WB~~1:2000 FC~~1:25 IF~~1:10~50 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CYK18 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRT18
Synonyms	CYK18
Function	Involved in the uptake of thrombin-antithrombin complexes by hepatic cells

(By similarity). When phosphorylated, plays a role in filament reorganization. Involved in the delivery of mutated CFTR to the plasma membrane. Together with KRT8, is involved in interleukin-6 (IL-6)-mediated barrier protection.

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.

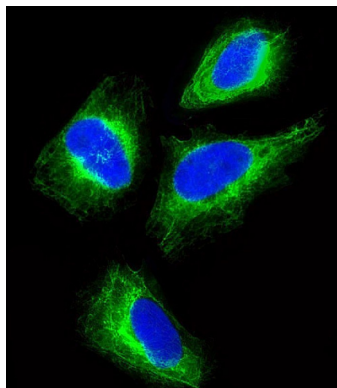
Background

KRT18 is the type I intermediate filament chain keratin 18. Keratin 18, together with its filament partner keratin 8, are perhaps the most commonly found members of the intermediate filament family. They are expressed in single layer epithelial tissues of the body. Mutations in its gene have been linked to cryptogenic cirrhosis.

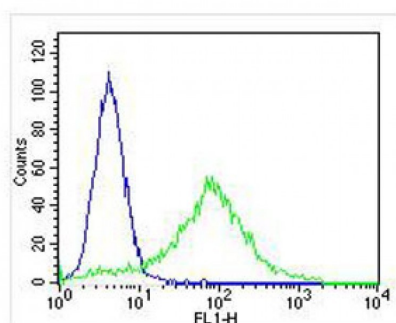
References

Zhang,Q., Clin. Cancer Res. 15 (10), 3557-3567 (2009)
Kruse,R., Folia Histochem. Cytobiol. 47 (1), 127-130 (2009)
Toivola,D.M., Hepatology 40 (2), 459-466 (2004)

Images

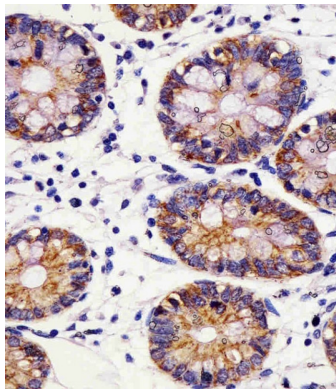


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling CYK18 with AP7376b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoskeleton staining on HeLa cell line. The nuclear counter stain is DAPI (blue).

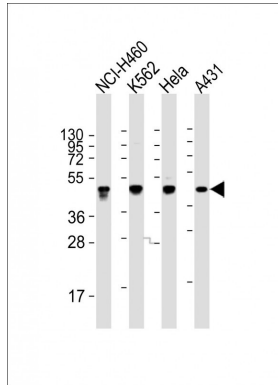


Overlay histogram showing HeLa cells stained with AP7376b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP7376b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, Dylight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.

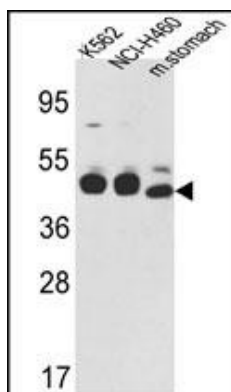
AP7376b staining CYK18 in human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3%



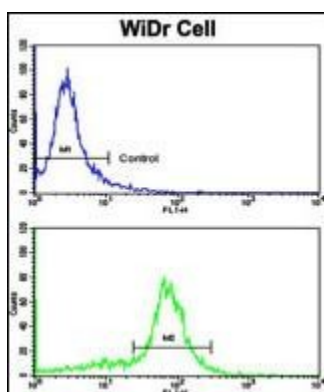
BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



All lanes : Anti-CYK18 Antibody (C-term) at 1:2000 dilution
Lane 1: NCI-H460 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: HeLa whole cell lysate Lane 4: A431 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

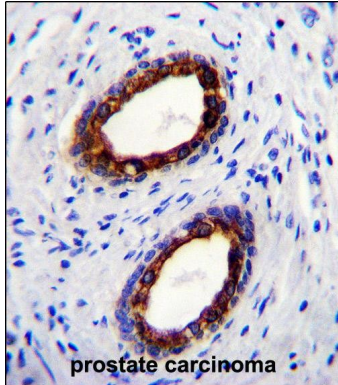
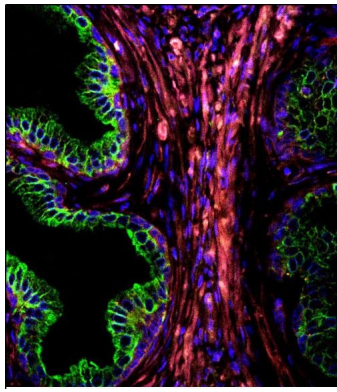


Western blot analysis of CYK18 Antibody (C-term)(Cat. #AP7376b) in K562,NCI-H460 cell line lysates and mouse stomach tissues lysates(35ug/lane). CYK18(arrow) was detected using the purified Pab.



Flow cytometric analysis of WiDr cells using CYK18 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Confocal immunofluorescent analysis of CYK18 Antibody (C-term) (Cat#AP7376b) with prostate carcinoma followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



CYK18 Antibody (C-term) (Cat. #AP7376b) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CYK18 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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