

For Research Use Only

Cytokeratin 7 Polyclonal antibody

Catalog Number: 15539-1-AP

24 Publications



Basic Information

Catalog Number:

15539-1-AP

Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG7895

GenBank Accession Number:

BC002700

GeneID (NCBI):

3855

UNIPROT ID:

P08729

Full Name:

keratin 7

Calculated MW:

469 aa, 51 kDa

Observed MW:

51 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:1000-1:30000

IF-P: 1:50-1:500

IF-Fro: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, rat liver tissue, A431 cells, mouse liver tissue, mouse bladder tissue, HepG2 cells, mouse lung tissue, rat bladder tissue, rat lung tissue

IHC: human pancreas tissue, human bowen disease, human breast cancer tissue, human kidney tissue, human lung tissue, human lung cancer tissue, human ovary tumor tissue, human stomach cancer tissue, mouse kidney tissue, mouse pancreas tissue, rat kidney tissue

IF-P: mouse pancreas tissue, rat liver tissue

IF-Fro: mouse breast cancer,

IF/ICC: HeLa cells,

FC (Intra): HeLa cells,

Background Information

Cytokeratin 7 (CK7) is a type II keratin protein that is a principal constituent of the intermediate filament cytoskeleton. It is primarily expressed in simple epithelia lining the cavities of internal organs, glandular ducts, and blood vessels. Abnormal expression of CK7 has been linked to various pathological conditions, including cancer. Overexpression of CK7 promotes tumor progression and metastasis in different human cancers, and its suppression leads to rapid tumor regression, highlighting its potential as a therapeutic target. CK7 is also involved in inhibiting interferon-dependent interphase, promoting DNA synthesis, initiating translation possibly through interaction with p150 (the largest subunit of eukaryotic translation initiation factor 3), and interacting with G protein-coupled estrogen receptor 1 (GPER1), which activates several signaling pathways. In the context of cancer diagnosis, CK7 is used as a marker to distinguish between different types of carcinomas. It is expressed in most adenocarcinomas, particularly those of the lung and colorectal origin, and is useful in differentiating primary ovarian carcinoma from metastatic colorectal carcinoma. CK7 expression has also been studied as a predictor of an unfavorable prognosis in colorectal carcinoma.

Notable Publications

Author	Pubmed ID	Journal	Application
Sainan Zhang	34603292	Front Immunol	IF
Ziyi Wang	36387215	Front Oncol	WB
Jiayi Zheng	29499763	Reprod Biol Endocrinol	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

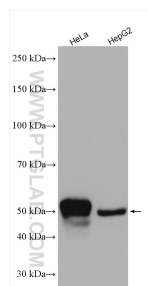
For technical support and original validation data for this product please contact:

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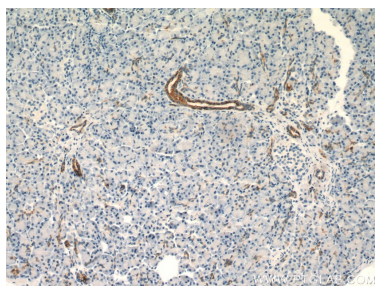
E: proteintech@ptglab.com
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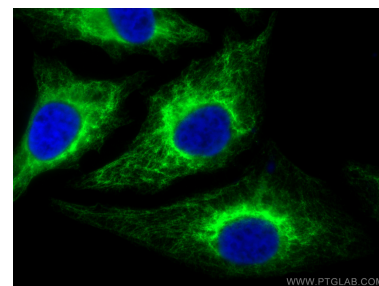
Selected Validation Data



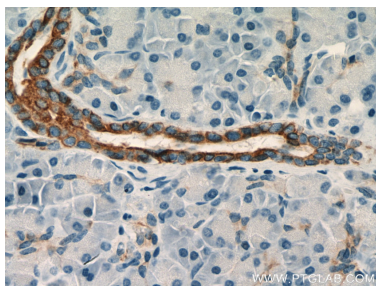
Various lysates were subjected to SDS PAGE followed by western blot with 15539-1-AP (Cytokeratin 7 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



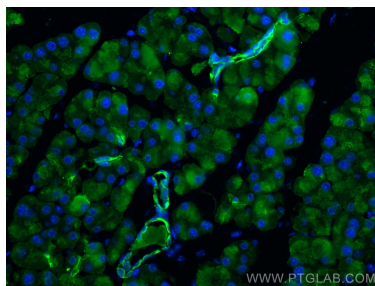
Immunohistochemical analysis of paraffin-embedded human pancreas tissue slide using 15539-1-AP (Cytokeratin 7 antibody) at dilution of 1:25600 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



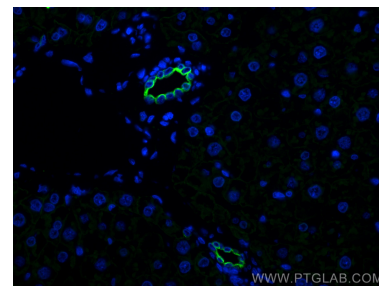
Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using Cytokeratin 7 antibody (15539-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



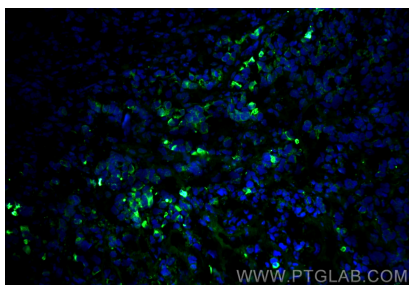
Immunohistochemical analysis of paraffin-embedded human pancreas tissue slide using 15539-1-AP (Cytokeratin 7 antibody) at dilution of 1:25600 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



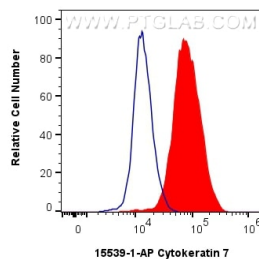
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse pancreas tissue using Cytokeratin 7 antibody (15539-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat liver tissue using Cytokeratin 7 antibody (15539-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of un-fixed frozen OCT-embedded mouse breast cancer using Cytokeratin 7 antibody (15539-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10⁶ HeLa cells were intracellularly stained with 0.8 ug Cytokeratin 7 Polyclonal antibody (15539-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.8 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).