

Cytokeratin 7 Recombinant monoclonal antibody

Catalog Number: 86153-7-RR

Basic Information

Catalog Number:	86153-7-RR	GenBank Accession Number:	NM_005556	Purification Method:	Protein A purification
Source:	Rabbit	GenID (NCBI):	3855	CloneNo.:	242229F1
Isotype:	IgG	UNIPROT ID:	P08729	Recommended Dilutions:	WB: 1:5000-1:50000 IHC: 1:1000-1:4000 IF-P: 1:50-1:500 IF/ICC: 1:1000-1:4000
		Full Name:	keratin 7		
		Calculated MW:	51 kDa		
		Observed MW:	51 kDa		

Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, ELISA

Species Specificity:
human

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, A549 cells

IHC: human breast cancer tissue, human appendicitis tissue, human liver tissue, human pancreas tissue

IF-P: human breast cancer tissue,

IF/ICC: HEPG2 cells,

Background Information

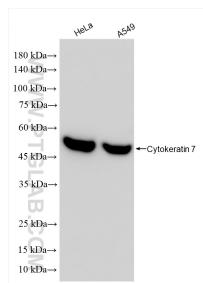
Cytokeratin 7 (CK7) is a type II keratin protein that is a principal constituent of the intermediate filament cytoskeleton. It is primarily expressed in simple epithelia lining the cavities of internal organs, glandular ducts, and blood vessels. Abnormal expression of CK7 has been linked to various pathological 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.

Storage

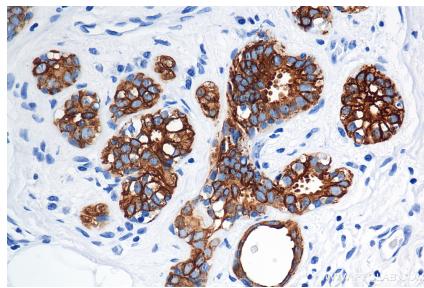
Storage:
Store at -20°C. Stable for one year after shipment.

Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

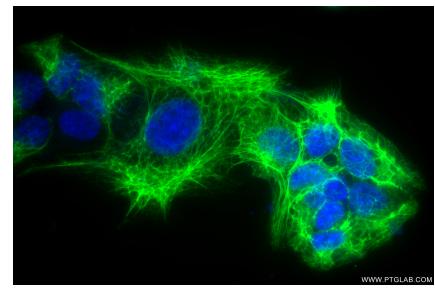
Selected Validation Data



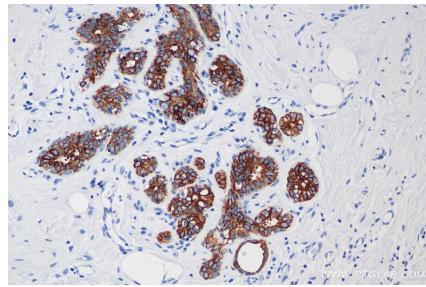
Various lysates were subjected to SDS PAGE followed by western blot with 86153-7-RR (CK7-Specific antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



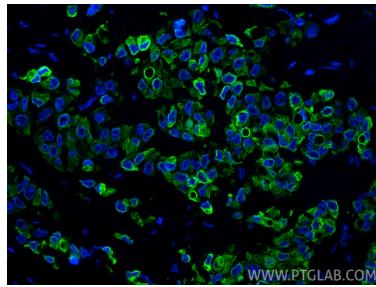
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 86153-7-RR (Cytokeratin 7 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



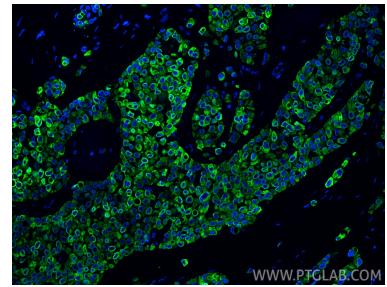
Immunofluorescent analysis of (-20°C Methanol) fixed HEPG2 cells using Cytokeratin 7 antibody (86153-7-RR, Clone: 242229F1) at dilution of 1:2000 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



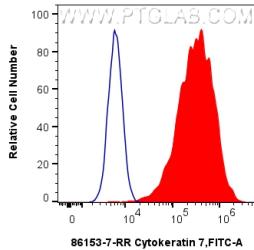
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 86153-7-RR (Cytokeratin 7 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human breast cancer tissue using Cytokeratin 7 antibody (86153-7-RR, Clone: 242229F1) 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 (4% PFA) fixed paraffin-embedded human breast cancer tissue using Cytokeratin 7 antibody (86153-7-RR, Clone: 242229F1) 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).



1x10⁶ HeLa cells were intracellularly stained with 0.25 ug Cytokeratin 7 Recombinant monoclonal antibody (86153-7-RR, Clone:242229F1) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019).