

For Research Use Only

Cytokeratin 14 Polyclonal antibody

Catalog Number: 10143-1-AP

Featured Product

99 Publications



Basic Information

Catalog Number:

10143-1-AP

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0188

GenBank Accession Number:

BC002690

GeneID (NCBI):

3861

UNIPROT ID:

P02533

Full Name:

keratin 14

Calculated MW:

472 aa, 52 kDa

Observed MW:

47-50 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:2000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:200-1:8000

IF/ICC: 1:200-1:800

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, 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: A431 cells, rat skin tissue

IP: A431 cells,

IHC: human lung cancer tissue, human breast cancer tissue, human cervical cancer tissue, human lung squamous cell carcinoma tissue, human oesophagus cancer tissue, human skin tissue, human skin cancer tissue, mouse skin tissue, rat skin tissue

IF/ICC: HaCaT cells, HeLa cells, HepG2 cells, mouse olfactory epithelium tissue

FC (Intra): A431 cells,

Background Information

Keratins are a large family of proteins that form the intermediate filament cytoskeleton of epithelial cells, which are classified into two major sequence types. Type I keratins are a group of acidic intermediate filament proteins, including K9-K23, and the hair keratins Ha1-Ha8. Type II keratins are the basic or neutral counterparts to the acidic type I keratins, including K1-K8, and the hair keratins, Hb1-Hb6. Keratin 14 is a type I cytokeratin. It is usually found as a heterotetramer with keratin 5. Keratins K14 and K5 have long been considered to be biochemical markers of the stratified squamous epithelia, including epidermis.

Notable Publications

Author	Pubmed ID	Journal	Application
Vlasta Lungova	31551422	Nat Commun	IF
Zichun Gu	28975248	JAMA Facial Plast Surg	IHC
Zhen-Huang Chen	32918999	Mol Cell Neurosci	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

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

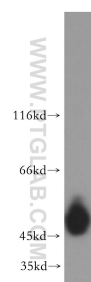
T: 4006900926

E: Proteintech-CN@ptglab.com

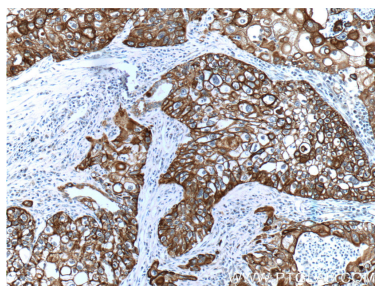
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

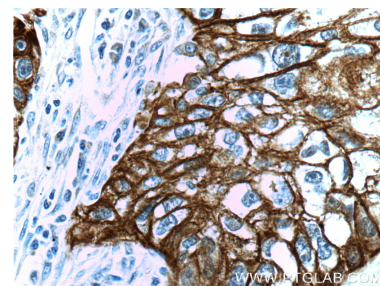
Selected Validation Data



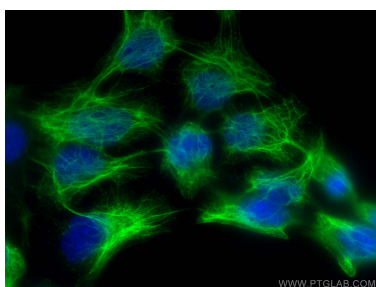
A431 cells were subjected to SDS PAGE followed by western blot with 10143-1-AP (Cytokeratin 14 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



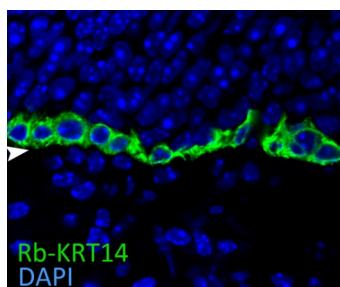
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 10143-1-AP (Cytokeratin 14 antibody at dilution of 1:200 (under 10x lens).



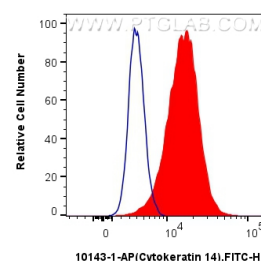
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 10143-1-AP (Cytokeratin 14 antibody at dilution of 1:200 (under 40x lens).



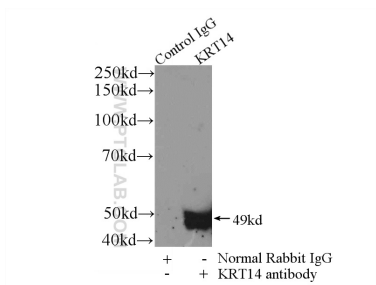
Immunofluorescent analysis of (-20°C Methanol) fixed HaCaT cells using Cytokeratin 14 antibody (10143-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



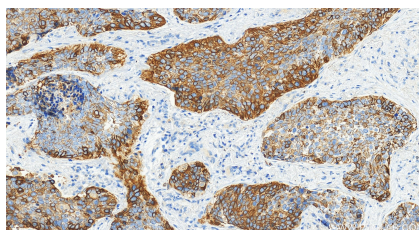
IF result of CK14 (10143-1-AP, 1:400) with 1% PLP fixed basal quiescent stem cells of the adult mouse olfactory epithelium. (Green: CK14; Blue: DAPI). Basal lamina is marked by an arrow head. By Brian Lin, Tufts University.



1X10⁶ A431 cells were intracellularly stained with 0.4 ug Anti-Human Cytokeratin 14 (10143-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug rabbit IgG isotype control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.



IP result of anti-Cytokeratin 14 (IP:10143-1-AP, 3ug; Detection:10143-1-AP 1:1000) with A431 cells lysate 1200ug.



Immunohistochemical analysis of paraffin-embedded human lung squamous cell carcinoma tissue slide using 10143-1-AP (Cytokeratin 14 antibody) at dilution of 1:8000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).