

# Cytokeratin 8 Monoclonal Antibody (LP3K), eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	LP3K
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_10557242

Applications	Tested Dilution	Publications
Western Blot (WB)	1-10 µg/mL	-
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	1-10 µg/mL	-

## Product Specific Information

**Description:** This LP3K monoclonal antibody reacts with human cytokeratin 8 (K8), a 55-kDa member of the family of intermediate filament proteins. Cytokeratin 8 is a type II (or basic) keratin that is expressed in epithelial and carcinoma cells. Cytokeratins form the intracellular cytoskeletal network that maintains the integrity and stability of cells and tissues. More specifically, studies have demonstrated the involvement of cytokeratin 8 in protection against apoptosis, stress, or injury, as well as regulation of the cell cycle. This keratin is frequently co-expressed with cytokeratin 18, a type I (or acidic) keratin as a heterodimer. Although detected primarily in the cytoplasm of normal healthy cells, cytokeratin 8 has been found to localize to the plasma membrane in some tumor cells. Finally, cytokeratin 8 is phosphorylated on serine 73 in dividing cells.

**Applications Reported:** This LP3K antibody has been reported for use in immunoblotting (WB) and immunocytochemistry.

**Applications Tested:** This LP3K antibody has been tested by western blot analysis of reduced A549 cell lysate, as well as by immunocytochemistry of A549 cells. For western blotting, this antibody can be used at 1-10 µg/mL. For immunocytochemistry, LP3K can be used at 1 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

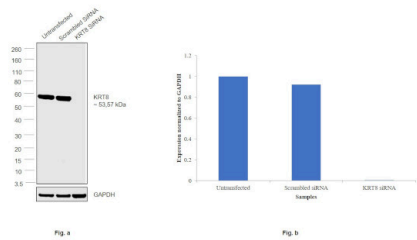
**Purity:** Greater than 90%, as determined by SDS-PAGE.

**Aggregation:** Less than 10%, as determined by HPLC.

**Filtration:** 0.2 µm post-manufacturing filtered.

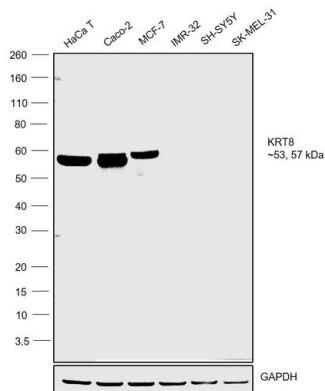
Cytokeratin 8 Antibody (14-9938-82)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. Caco-2 cells were transfected with Cytokeratin 8 siRNA and decrease in signal intensity was observed in Western Blot application using Anti-Cytokeratin 8 Monoclonal Antibody (LP3K), eBioscience™ (Product # 14-9938-82). {KD}



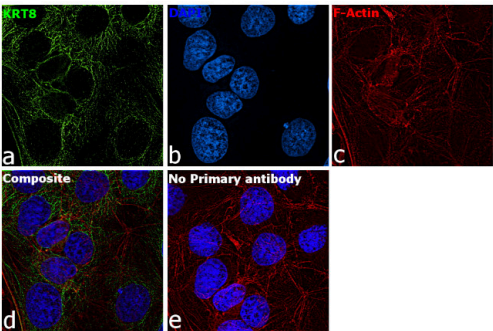
Cytokeratin 8 Antibody (14-9938-82) in WB

Western blot was performed using Anti-Cytokeratin 8 Monoclonal Antibody (LP3K), eBioscience™ (Product # 14-9938-82) and 53 & 57 kDa bands corresponding to Cytokeratin 8 was observed across the cell lines except IMR-32, SH-SY5Y and SK-MEL-31. Whole cell extracts (30 µg lysate) of HaCaT (Lane 1), Caco-2 (Lane 2), MCF-7 (Lane 3), IMR-32 (Lane 4), SH-SY5Y (Lane 5) and SK-MEL-31 (Lane 6) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # LC2001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody at a concentration of 1 µg/mL and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



Cytokeratin 8 Antibody (14-9938-82) in ICC/IF

Immunofluorescence analysis of Cytokeratin 8 was performed using 70% confluent log phase Caco-2 cells. The cells were fixed with ice-cold acetone at 4° C for 5 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with Cytokeratin 8 Monoclonal Antibody (LP3K), eBioscience™ (Product # 14-9938-82) at a concentration of 1 µg/mL in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300 dilution). Panel d represents the merged image showing cytoskeletal localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



View more figures on [thermofisher.cn](http://thermofisher.cn)

Immunohistochemistry (1)

Cell reports methods	Year 2021
<b>SeqStain is an efficient method for multiplexed, spatialomic profiling of human and murine tissues.</b>	
"Published figure using Cytokeratin 8 monoclonal antibody (Product # 14-9938-82) in Immunocytochemistry"	
Authors: Rajagopalan A,Venkatesh I,Aslam R,Kirchenbuechler D,Khanna S,Cimbaluk D,Kordower JH,Gupta V	

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.