

Datasheet for 200-301-P33**Cytokeratin Peptide 18 Antibody****Overview**

Description:	Anti-Cytokeratin Peptide 18 (MOUSE) Antibody - 200-301-P33
Item No.:	200-301-P33
Size:	100 µg
Applications:	IF, IHC, WB
Reactivity:	Human, Rat
Host Species:	Mouse

Product Details

Background:	Intermediate filaments (IFs) are a structurally related family of cellular proteins that appear to be intimately involved with the cytoskeleton. Human keratin 18(KRT18) and the homologous mouse Endo B are type I IF protein subunits whose expression is restricted in adults to a variety of simple epithelial tissues. The KRT18 gene is 3,791 bp long and the keratin 18 protein is coded for by 7 exons. The K18 gene is 3791 bp in length and the K18 protein is coded for by seven exons. By Southern blotting using the genomic DNA PCR product, the gene for keratin 18 is assigned to chromosome 12. Mutation of human keratin 18 in association with cryptogenic cirrhosis. This antibody is suitable for researchers interested in cancer research, cardiovascular diseases, and cytoskeletal signaling research.
Synonyms:	K18, Keratin-18, CK-18, Cytokeratin-18, CYK18, Cell proliferation-inducing gene 46 protein
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	CY-90
Format:	IgG1

Target Details

Gene Name:	KRT18
Reactivity:	Human, Rat
Immunogen Type:	Other

Immunogen:	Cytokeratin Peptide 18 antibody was produced in mice by repeated immunizations with the human epidermal carcinoma A-431 and MCF-7 human breast cancer cell lines.
Purity/Specificity:	Anti-Cytokeratin Peptide 18 antibody was purified from mouse ascites by protein A chromatography. This product reacts with human and rat. Cross reactivity with Cytokeratin Peptide 18 from other sources has not been determined.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P05783• GeneID - 3875• NCBI - NP_000215.1

Application Details

Tested Applications:	IF, IHC, WB
Application Note:	Anti-Cytokeratin Peptide 18 is tested for Immunohistochemistry-F, Immunohistochemistry-P, Immunofluorescence, and Western Blot. Expect a band approximately ~48 kDa corresponding to the appropriate cell lysate or extract. western blot tested in human. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	0.5-2µg/ml
WB:	0.5-1µg/ml

Formulation

Physical State:	Lyophilized
Concentration:	100 µg/ml by UV absorbance at 280 nm
Buffer:	1.2% sodium acetate
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	2mg BSA
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Neutral PBS

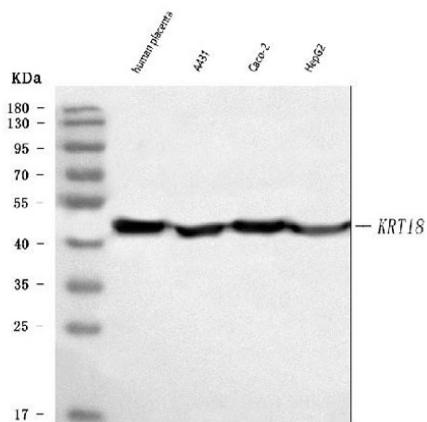
Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

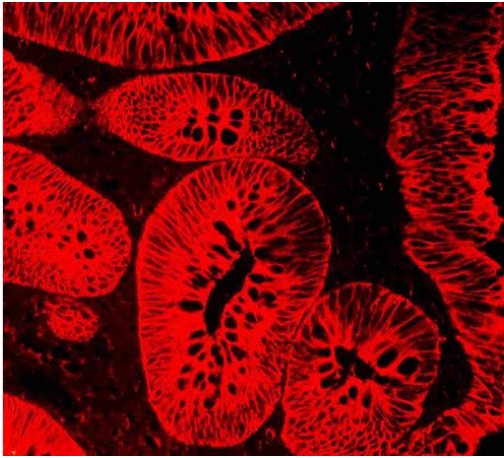
Western blot analysis of Cytokeratin Peptide 18 using anti-Cytokeratin Peptide 18 antibody.

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30µg of sample under reducing conditions.

Lane 1: human placenta tissue lysates, Lane 2: human A431 whole cell lysates, Lane 3: human CACO-2 whole cell lysates, Lane 4: human HepG2 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT.

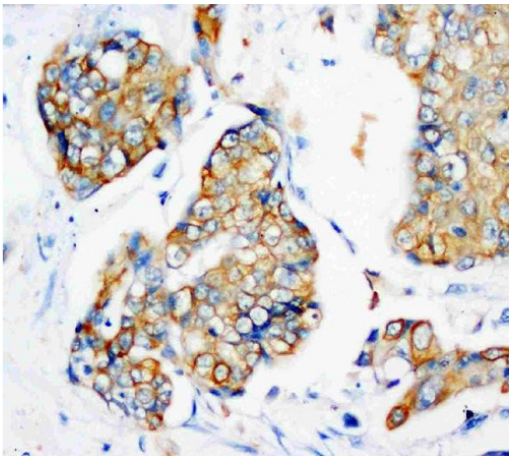
The membrane was incubated with affinity purified mouse anti-Cytokeratin Peptide 18 antigen monoclonal antibody at 1 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at 1:10,000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Cytokeratin Peptide 18 at approximately 48 kDa. The expected band size for Cytokeratin Peptide 18 is at 48 kDa.



Immunofluorescence Microscopy

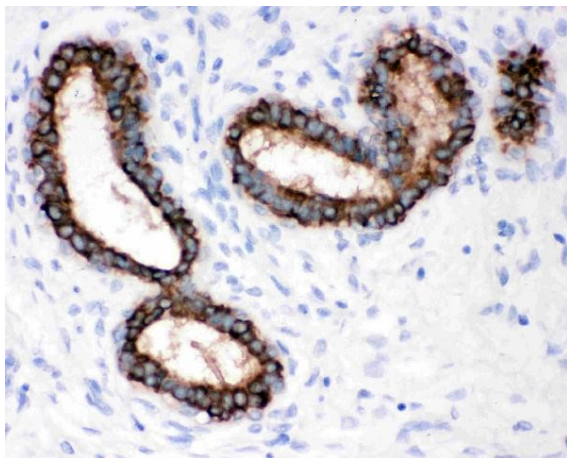
Immunofluorescence analysis of Cytokeratin Peptide 18 using anti-Cytokeratin Peptide 18 antibody. Cytokeratin Peptide 18 was detected in a paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum.

The tissue section was then incubated with 5 µg/mL mouse anti-Cytokeratin Peptide 18 Antibody overnight at 4°C. Biotin conjugated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Cy3 Conjugated Avidin. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Immunohistochemistry

Immunohistochemistry analysis of Cytokeratin Peptide 18 using anti-Cytokeratin Peptide 18 antibody. Cytokeratin Peptide 18 was detected in a paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-Cytokeratin Peptide 18 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.



Immunohistochemistry

Immunohistochemistry analysis of Cytokeratin Peptide 18 using anti-Cytokeratin Peptide 18 antibody. Cytokeratin Peptide 18 was detected in a paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-Cytokeratin Peptide 18 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.