

Product Datasheet

Cytokeratin 18 Antibody (E431-1)

NB110-56910

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

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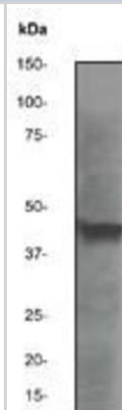


NB110-56910**Cytokeratin 18 Antibody (E431-1)**

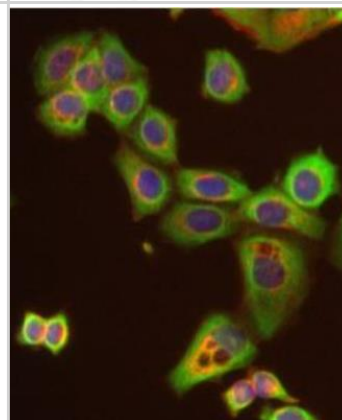
Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	E431-1
Preservative	0.01% Sodium Azide
Isotype	IgG
Purity	Protein A or G purified
Buffer	49% PBS, 0.05% BSA and 50% Glycerol
Target Molecular Weight	48 kDa
Product Description	
Host	Rabbit
Gene ID	3875
Gene Symbol	KRT18
Species	Human, Mouse (Negative), Rat (Negative)
Marker	Epithelial Marker
Immunogen	A synthetic peptide corresponding to residues of human Cytokeratin 18 was used as immunogen. Human Cytokeratin 18 (K18) was used as immunogen after isolation from cells pretreated with okadaic acid or pervanadate to promote Tyr hyperphosphorylation.
Notes	Produced using Abcam's RabMab® technology. RabMab® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,487.
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:1000-10000, Flow Cytometry 1:20, Immunohistochemistry 1:10-1:500, Immunocytochemistry/Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:100-1:250
Application Notes	This product is useful for: Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry, Flow Cytometry. In Western blot this antibody detects a band at approximately 45kDa. Use in Rat reported in customer review.

Images

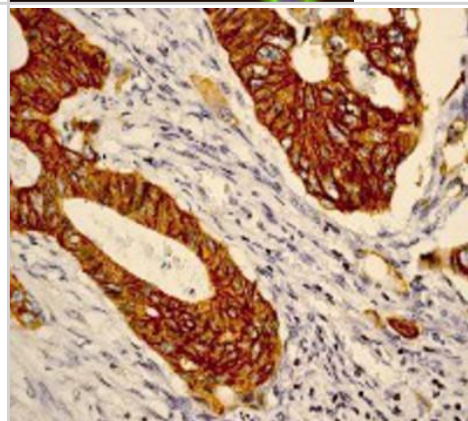
Western Blot: Cytokeratin 18 Antibody (E431-1) [NB110-56910] - 15 ng recombinant protein using a 1:1000 dilution.



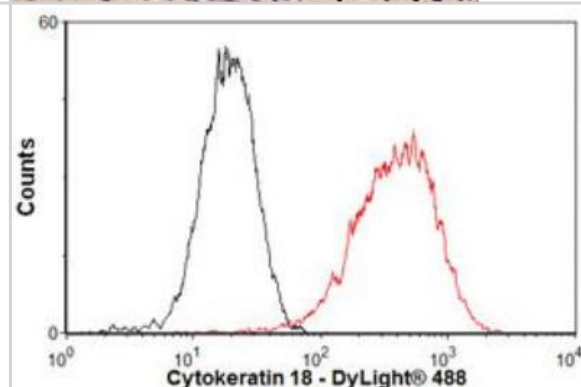
Immunocytochemistry/Immunofluorescence: Cytokeratin 18 Antibody (E431-1) [NB110-56910] - MCF7 cells.



Immunohistochemistry: Cytokeratin 18 Antibody (E431-1) [NB110-56910] - Immunohistochemical analysis of paraffin-embedded colon carcinoma using anti-Keratin 18.



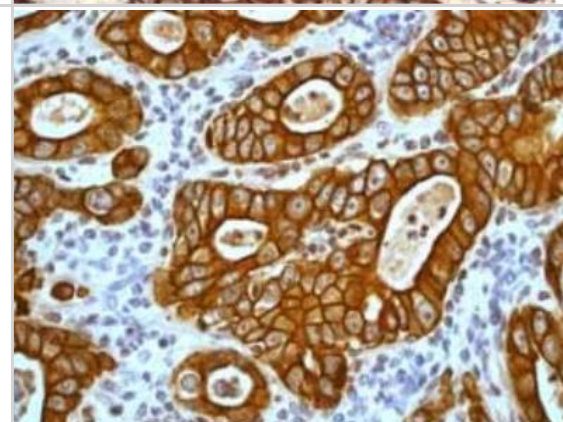
Flow Cytometry: Cytokeratin 18 Antibody (E431-1) [NB110-56910] - Overlay histogram showing MCF7 cells stained with (red line).



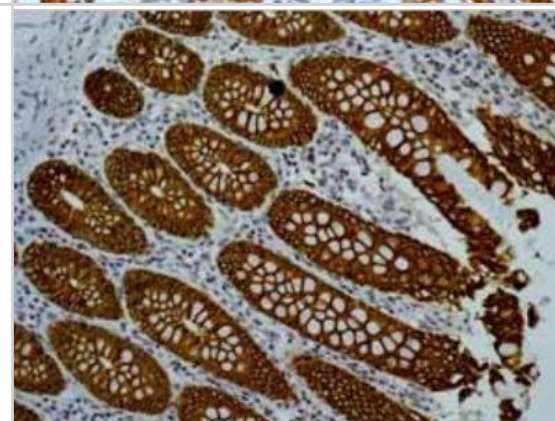
Immunohistochemistry-Paraffin: Cytokeratin 18 Antibody (E431-1)
[NB110-56910] - Staining in Breast carcinoma tissue.



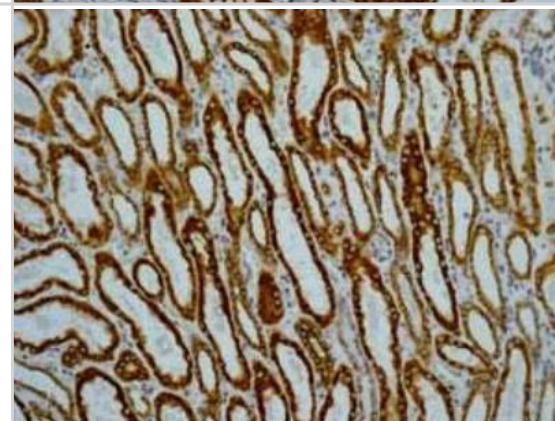
Immunohistochemistry-Paraffin: Cytokeratin 18 Antibody (E431-1)
[NB110-56910] - Staining in Gastric adenocarcinoma tissue.



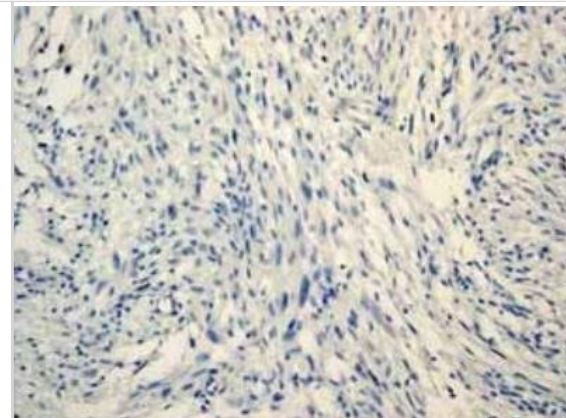
Immunohistochemistry-Paraffin: Cytokeratin 18 Antibody (E431-1)
[NB110-56910] - Staining in Normal colon tissue.



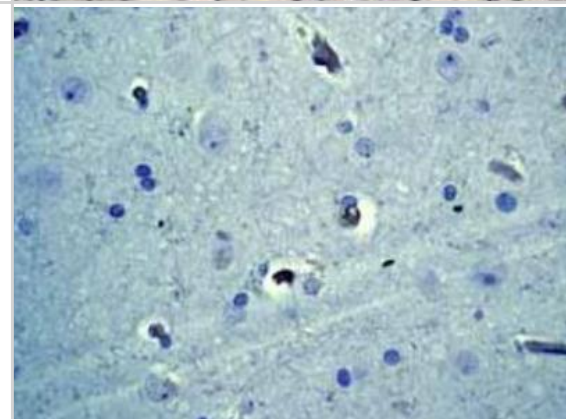
Immunohistochemistry-Paraffin: Cytokeratin 18 Antibody (E431-1)
[NB110-56910] - Staining in Normal kidney tissue.



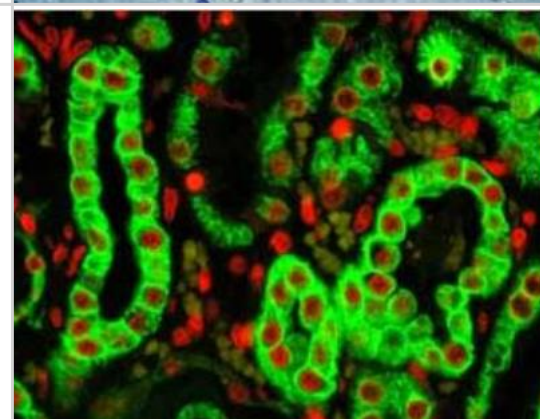
Immunohistochemistry-Paraffin: Cytokeratin 18 Antibody (E431-1)
[NB110-56910] - Negative staining in Glioma tissue.



Immunohistochemistry-Paraffin: Cytokeratin 18 Antibody (E431-1)
[NB110-56910] - Negative staining in Normal brain tissue.



Immunohistochemistry-Paraffin: Cytokeratin 18 Antibody (E431-1)
[NB110-56910] - Paraffin-embedded human normal kidney tissue.



Publications

Yin Y, Yuan H, Zeng X et al. Inhibition of peroxisome proliferator-activated receptor gamma increases estrogen receptor-dependent tumor specification. Cancer Res 2009 Jan [PMID: 19147585]

Procedures



Immunohistochemistry Protocol for Cytokeratin 18 Antibody (NB110-56910)**Immunohistochemistry Protocol for Paraffin-embedded Tissues****1. Solutions and reagents****1.1. Xylene****1.2. Ethanol, anhydrous denatured, histological grade (100%, 95%, 70%)****1.3. Washing buffer:**

TBST washing buffer: 1XTBS/0.1% Tween-20

To prepare stock solution of 10X TBS: add 24.2 g Trizma base and 80 g sodium chloride to 1L of dH₂O. Adjust pH to 7.6.

Working solution. 1XTBST/0.1% Tween-20: add 100ml 10XTBS to 900 ml dH₂O. Add 1 ml Tween-20 and mix well.

1.4. Distilled water (dH₂O)**1.5. Antigen Retrieval Solution:**

0.01M Sodium Citrate Buffer, pH 6.0

To prepare stock solutions:

Solution A. 0.1 M citric acid solution: dissolve 21.0 g of citric acid, monohydrate (C₆H₈O₇·H₂O) in 1 liter of dH₂O.

Solution B. 0.1M sodium citrate solution: dissolve 29.4 g trisodium citrate dihydrate (C₆H₅Na₃O₇·2H₂O) in 1 liter of dH₂O.

Working solution: Add 9 ml of Stock solution A and 41 ml of stock solution B to 450 ml of dH₂O. Adjust pH to 6.0.

1.6. 3% Hydrogene Peroxide**1.7. Blocking buffer:**

PBS (Dulbeccos Phosphate Buffered Salts, 1X, catalog #21-031-CV from Mediatech, Inc.) + 10% serum (serum origin depends on the host of the secondary antibody)

1.8. Hematoxylin QS (catalog #H-3404 from Vector Laboratories, Inc.)**1.9. Permanent Mounting medium (VectaMount, catalog# H-5000 Vector Laboratories, Inc.)****2. Protocol****2.1. Deparaffinization/Rehydration****2.1.1. Heat slides in an oven at 65C for 1 hour.**

2.1.2. De-paraffinize/hydrate using the following series of washes: two Xylene washes (5 min each), followed by two 100% ethanol rinses (5 min each), followed by 95% ethanol, 70% ethanol, 50% ethanol, 30% ethanol, followed by H₂O and a TBST wash for 5 min on a shaker.

2.2. Antigen Retrieval

2.2.1. Immerse slides into staining dish containing Antigen Retrieval Solution.

2.2.2. Place covered staining dish into the rice cooker. Add 120 ml of dH₂O.

2.2.3. When cook is turned to warm (about 20 to 30 min), unplug the cooker and remove the staining dish to the bench top.

2.2.4. Allow to cool down, without cover, for 20 min.

2.3. Staining

2.3.1. Wash slides with TBST for 5 min on a shaker.

2.3.2. Inactivate endogenous peroxidase by covering tissue with 3% hydrogen peroxide for 10 min.

2.3.3. Wash slides three times with TBST (3 min each on a shaker).

2.3.4. Block slides with the blocking solution for 1 hour.

2.3.5. Dilute primary antibody in the blocking buffer per recommendation on the data sheet.

2.3.6. Apply primary antibody to each section and incubate overnight in the humidified chamber (4C).

2.3.7. Wash slides three times with TBST (3 min each on a shaker).

2.3.8. Apply to each section secondary HRP-conjugated anti-rabbit antibody diluted in the blocking solution per manufacturers recommendation; incubate for 1 hour at room temperature.

2.3.9. Wash slides three times with TBST (3 min each on a shaker).

2.3.10. Add freshly prepared DAB substrate to the sections.

2.3.11. Incubate tissue sections with the substrate at room temperature until suitable staining develops (generally 2 to 5 min).

2.3.12. Rinse sections with water.

2.3.13. Counterstain with Hematoxylin.

2.3.14. Rinse sections with water.

2.3.15. Dehydrate samples using two rinses with 100% Ethanol (20 dips per rinse) followed by two rinses with Xylene (30 dips per rinse).

2.3.16. Mount coverslips on slides using Permount medium.



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This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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