Product Datasheet

Cytokeratin 5 Antibody (EP1601Y) NB110-56916

Unit Size: 0.1 ml

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

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NB110-56916

Cytokeratin 5 Antibody (EP1601Y)

Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	EP1601Y
Preservative	No Preservative
Isotype	IgG
Purity	Tissue culture supernatant
Buffer	Culture supernatant in buffered aqueous solution
Target Molecular Weight	62 kDa
Product Description	
Host	Rabbit
Gene ID	3852
Gene Symbol	KRT5
Species	Human
Immunogen	A synthetic peptide corresponding to residues on the C-terminus of human CK-5 was used as an immunogen.
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry- Paraffin
Recommended Dilutions	Western Blot, Simple Western 1:100, Immunohistochemistry 1:50-1:200, Immunocytochemistry/ Immunofluorescence 1:100-250, Immunohistochemistry- Paraffin 1:50-1:200, Immunohistochemistry-Frozen
Application Notes	Use in Immunohistochemistry-Frozen reported in scientific literature (PMID: 26419726) This is a high affinity, high titer antibody. Optimal dilutions should be determined by the end user. (Provided dilutions serve only as a suggestive starting point.). In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. Separated by Size-Wes, Sally Sue/Peggy Sue.



Images Western Blot: Cytokeratin 5 Antibody (EP1601Y) [NB110-56916] -Expression of cytokeratins (CK) and GAPDH in HMGEC. Representative western blots show specific bands for GAPDH, CK1, Cytokeratin 5, CK6 and CK14. Image collected and cropped by CiteAb from the following publication (https://journals.plos.org/plosone/article? id=10.1371/journal.pone.0128096) licensed under a CC-BY license. Immunocytochemistry/Immunofluorescence: Cytokeratin 5 Antibody (EP1601Y) [NB110-56916] - A431 cells. Immunohistochemistry-Paraffin: Cytokeratin 5 Antibody (EP1601Y) [NB110-56916] - Cytokeratin 5 (EP1601Y) on prostate. Immunohistochemistry-Paraffin: Cytokeratin 5 Antibody (EP1601Y) [NB110-56916] - Cytokeratin 5 antibody labels squamous elements in the basal epidermis and sebaceous glands.



Immunohistochemistry-Paraffin: Cytokeratin 5 Antibody (EP1601Y) [NB110-56916] - Rabbit monoclonal CK5 antibody strongly highlights mesothelioma cells in a cytoplasmic pattern.



Simple Western: Cytokeratin 5 Antibody (EP1601Y) [NB110-56916] -Simple Western lane view shows a specific band for Cytokeratin 5 in 0.5 mg/ml of A431 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.

Publications

Li S, Goncalves KA, Lyu B et al. Chemosensitization of prostate cancer stem cells in mice by angiogenin and plexin-B2 inhibitors Commun Biol 2020-01-15 [PMID: 31942000]

Li Z, Zeng M, Deng Y et al. Nasal polyps 15-lipoxygenase 1 promotes CCL26/Eotaxin3 expression through ERK activation J. Allergy Clin. Immunol. 2019-07-10 [PMID: 31301373] (ICC/IF, Human)

Gindele JA, Mang S, Pairet N et al. Opposing effects of in vitro differentiated macrophages sub-type on epithelial wound healing PLoS ONE 2017-09-01 [PMID: 28863189] (ICC/IF, Human)

Pedrosa AR, Graça JL, Carvalho S et al. Notch signaling dynamics in the adult healthy prostate and in prostatic tumor development. Prostate 2016-01-01 [PMID: 26419726] (IHC-Fr)

Hampel U, Schroder A, Mitchell T et al. Serum-induced keratinization processes in an immortalized human meibomian gland epithelial cell line. PLoS One 2015-01-01 [PMID: 26042605] (Human)

Alexander M, Reising B, Schumacher S et al. Validation of markers for the screening and identification of disseminating tumor cells in lymph nodes and bone marrow. Int J Clin Pharmacol Ther 2013-01-01 [PMID: 23260007] (ICC/IF, Human)

Miura Y, Harumiya S, Ono K et al. Galectin-7 and actin are components of amyloid deposit of localized cutaneous amyloidosis Exp Dermatol 2013-01-01 [PMID: 23278892] (IF/IHC, Human)

Mochizuki Y, Omura K, Sakamoto K et al. A case of primary combined neuroendocrine carcinoma with squamous cell carcinoma in the upper gingiva. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2010-04-01 [PMID: 20303044]



Procedures

Immunohistochemistry protocol for Cytokeratin 5 Antibody (NB110-56916)

Immunohistochemistry Protocol for Cytokeratin 5 Antibody (NB110-56916): 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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