abcam

Product datasheet

HRP Anti-Cytokeratin 7 antibody [EPR17078] ab209945

KO VALIDATED Recombinant RabMAb

4 Images

Overview

Product name	HRP Anti-Cytokeratin 7 antibody [EPR17078]
Description	HRP Rabbit monoclonal [EPR17078] to Cytokeratin 7
Host species	Rabbit
Conjugation	HRP
Tested applications	**Suitable for:** IHC-P, WB
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Rat
Immunogen	Recombinant fragment within Mouse Cytokeratin 7 aa 250 to the C-terminus. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements. Database link: **Q9DCV7**
Positive control	WB: Mouse Lung tissue lysate; HeLa and A549 whole cell lysate IHC-P: normal human breast tissue sections
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.1% Proclin 300 Solution

	Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17078
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab209945 in the following tested applications.

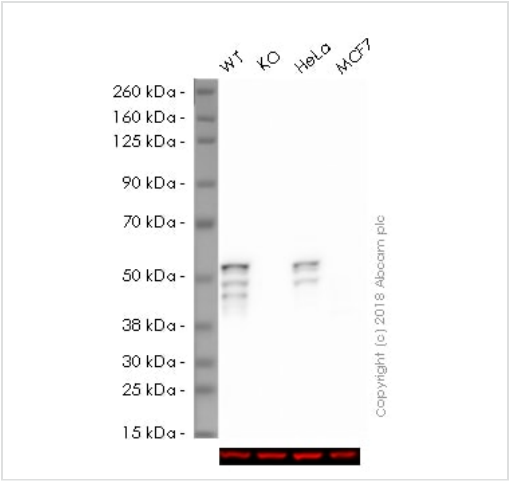
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/5000. Detects a band of approximately 53 kDa (predicted molecular weight: 51 kDa).

Target

Function	Blocks interferon-dependent interphase and stimulates DNA synthesis in cells. Involved in the translational regulation of the human papillomavirus type 16 E7 mRNA (HPV16 E7).
Tissue specificity	Expressed in cultured epidermal, bronchial and mesothelial cells but absent in colon, ectocervix and liver. Observed throughout the glandular cells in the junction between stomach and esophagus but is absent in the esophagus.
Sequence similarities	Belongs to the intermediate filament family.
Post-translational modifications	Arg-20 is dimethylated, probably to asymmetric dimethylarginine.
Cellular localization	Cytoplasm.

Images



Western blot - HRP Anti-Cytokeratin 7 antibody [EPR17078] (ab209945)

All lanes : HRP Anti-Cytokeratin 7 antibody [EPR17078] (ab209945) at 1/5000 dilution

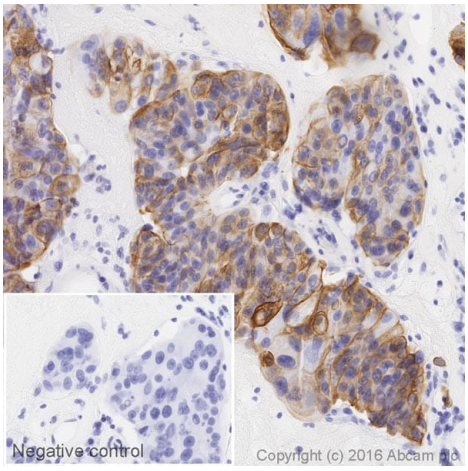
Lane 1 : Wild-type A549 (Human lung carcinoma cell line) whole cell lysate
Lane 2 : KRT7 knockout A549 (Human lung carcinoma cell line) whole cell lysate
Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 4 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 51 kDa

ab209945 was shown to specifically react with KRT7 in wild-type A549 cells as signal was lost in KRT7 knockout cells. Wild-type and KRT7 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab209945 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibody at 1/20000 dilution for 1 hour at room temperature. The loading control was imaged using the Licor Odyssey CLx prior to blots being developed with ECL technique.

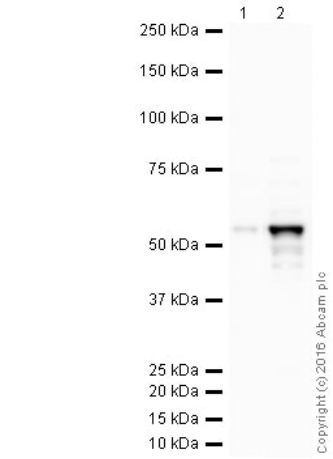


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - HRP Anti-Cytokeratin 7 antibody [EPR17078] (ab209945)

IHC image of Cytokeratin 7 staining in a section of formalin-fixed paraffin-embedded normal human breast*, performed on a Leica BOND™. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab209945, 1/100 dilution, for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - HRP Anti-Cytokeratin 7 antibody [EPR17078] (ab209945)

All lanes : HRP Anti-Cytokeratin 7 antibody [EPR17078] (ab209945) at 1/5000 dilution

Lane 1 : Lung (Mouse) Tissue Lysate
Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 51 kDa
Observed band size: 53 kDa

Exposure time: 15 seconds

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab209945 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.

HRP Anti-Cytokeratin 7 antibody [EPR17078]

(ab209945)

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