Product name: Anti-Cytokeratin 7 antibody [RCK105] - Cytoskeleton Marker

Description: Mouse monoclonal [RCK105] to Cytokeratin 7 - Cytoskeleton Marker

Host species: Mouse

Specificity: This antibody reacts exclusively with cytokeratin 7 which is present in a subgroup of glandular epithelia and their tumors, as well as transitional epithelium and transitional carcinoma.

Tested applications: Suitable for: IHC-Fr, IHC-P

Species reactivity: Reacts with: Human, Pig

Predicted to work with: Rat, Goat, Hamster, Cat, Dog, Zebrafish

Immunogen: Full length native protein (purified) corresponding to Human Cytokeratin 7. BALB/c mouse immunized with cytokeratins from the human bladder carcinoma cell line T24.

Positive control: IHC-P: Human liver tissue, mouse ovary and bladder tissue IHC-Fr: Human liver, urinary bladder tissue, Pig liver and skin tissue

General notes: The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As.

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 or -80°C. Avoid freeze / thaw cycle.

Storage buffer: Preservative: 0.09% Sodium azide
Constituent: PBS

Purity: Protein G purified

Clonality: Monoclonal
Clone number: RCK105
Myeloma: Sp2/0-Ag14
Isotype: IgG1

### Applications

**The Abpromise guarantee**

Our [Abpromise guarantee](https://www.abcam.com/abpromise) covers the use of ab9021 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<td>IHC-Fr</td>
<td>⭐⭐⭐⭐⭐ (2)</td>
<td>1/100 - 1/500.</td>
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<tr>
<td>IHC-P</td>
<td>⭐⭐⭐⭐⭐ (5)</td>
<td>1/1000.</td>
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### 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
Immunohistochemistry analysis of formalin fixed, paraffin embedded sections of human liver tissue labeling Cytokeratin 7 with ab9021 at 1/100; showing positive staining in the epithelial cells lining the bile ducts and no reactivity in hepatocytes or connective tissue.

ab9021 staining normal pig skin tissue section (frozen), staining epithelial cells using ab9021 at 1/500.

Immunofluorescent staining of β-galactosidase and cytokeratin expression of urinary bladder after intravesical treatment with Adeno-Cre

Formalin-fixed, paraffin-embedded mouse bladder tissue stained for β-galactosidase (green, A) or Cytokeratin 7 (red, B). Panel C shows the colocalization of β-galactosidase and Cytokeratin 7. The nuclear counterstain is DAPI (blue).

Cytokeratin 7 was detected using ab9021.

(After Figure 3 of Yang et al)
ab9021 staining normal breast tissue section (frozen), fixated in Methanol, staining epithelial cells. These pictures are part of the review submitted by Rene Villadsen.

Immunohistochemistry analysis of frozen sections of human liver labeling Cytokeratin 7 with ab9021 at 1/500; showing positive staining in the epithelial cells lining the bile ducts and no reactivity in hepatocytes or connective tissue.

Immunohistochemistry analysis of frozen sections of human urinary bladder labeling Cytokeratin 7 with ab9021 at 1/500; showing positive staining in the epithelial cells and no reactivity in connective tissue.
Immunohistochemistry on frozen sections of human liver, only bile duct epithelium positive; no reaction in hepatocytes

Immunohistochemistry on frozen sections of swine liver, only bile duct epithelium positive; no reaction in hepatocytes

Formalin fixed paraffin embedded mouse ovary tissue. Ab9021 used at 1:1000 incubated with overnight incubation with a biotinylated secondary and peroxidase/DAB detection.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"
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