abcam

Product datasheet

Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free ab239918

KO VALIDATED Recombinant RabMAb

2 References 10 Images

Overview

Product name	Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free
Description	Rabbit monoclonal [EPR3671] to Cytokeratin 13 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, Flow Cyt (Intra), IHC-P, WB **Unsuitable for:** IP
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: A431, HACAT or 293T cell lysate IHC: transitional cell urinary bladder carcinoma tissue Flow Cyt (intra): A431 cells ICC/IF: A431 cells
General notes	ab239918 is the carrier-free version of **ab92551**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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**.

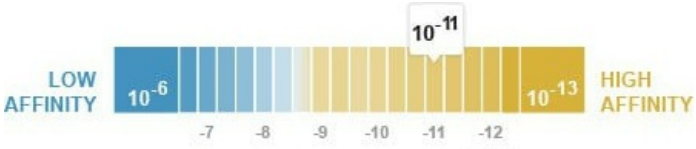
Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Dissociation constant (K_D) $K_D = 1.20 \times 10^{-11}$ M



Learn more about K_D

Storage buffer pH: 7.2
Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number EPR3671

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab239918 in the following tested applications.

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

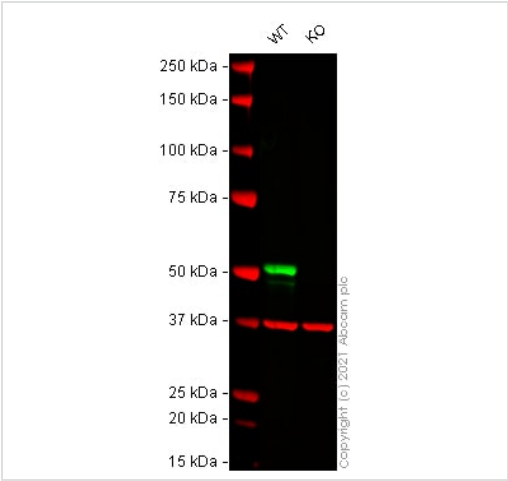
Application	Abreviews	Notes
ICC/IF		1/500.
Flow Cyt (Intra)		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 50 kDa.

Application notes Is unsuitable for IP.

Target

Tissue specificity	Expressed in some epidermal sweat gland ducts (at protein level) and in exocervix, esophagus and placenta.
Involvement in disease	Defects in KRT13 are a cause of white sponge nevus of cannon (WSN) [MIM:193900]. WSN is a rare autosomal dominant disorder which predominantly affects non-cornified stratified squamous epithelia. Clinically, it is characterized by the presence of soft, white, and spongy plaques in the oral mucosa. The characteristic histopathologic features are epithelial thickening, parakeratosis, and vacuolization of the suprabasal layer of oral epithelial keratinocytes. Less frequently the mucous membranes of the nose, esophagus, genitalia and rectum are involved.
Sequence similarities	Belongs to the intermediate filament family.
Post-translational modifications	O-glycosylated; glycans consist of single N-acetylglucosamine residues.

Images



Western blot - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

All lanes : Anti-Cytokeratin 13 antibody [EPR3671] (**ab92551**) at 1/100000 dilution

Lane 1 : Wild-type A431 cell lysate
Lane 2 : KRT13 knockout A431 cell lysate

Lysates/proteins at 20 µg per lane.

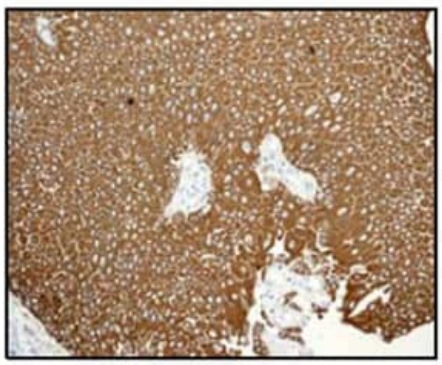
Performed under reducing conditions.

Predicted band size: 50 kDa
Observed band size: 51 kDa

False colour image of Western blot: Anti-Cytokeratin 13 antibody [EPR3671] staining at 1/100000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, **ab92551** was shown to bind specifically to Cytokeratin 13. A band was observed at 51 kDa in wild-type A431 cell lysates with no signal observed at this size in Krt13 knockout cell line **ab269483** (knockout cell lysate **ab269647**). To generate this image, wild-type and Krt13 knockout A431 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit

IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.

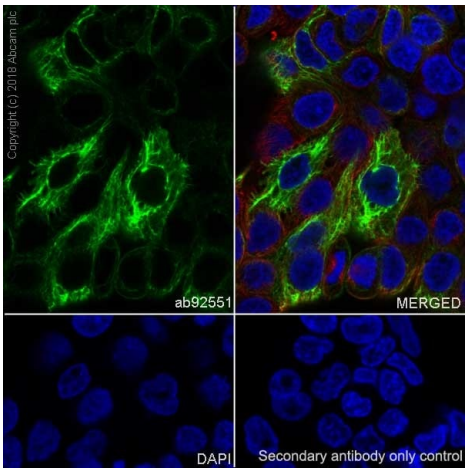
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

ab92551 at 1/100 dilution staining Cytokeratin 13 in formalin-fixed, paraffin-embedded human transitional cell usrinary bladder carcinoma tissue by immunohistochemistry. Detection: DAB staining. Antigen retrieval was heat mediated via the pressure cooker method before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).

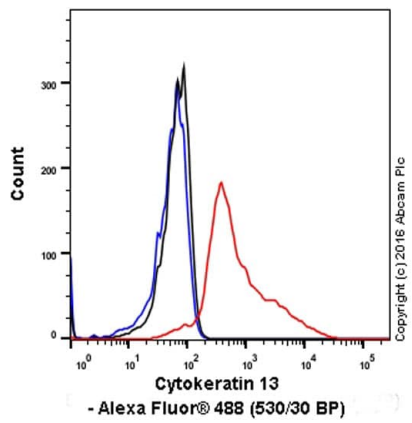


Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

Immunocytochemistry analysis of A431 (human epidermoid carcinoma epithelial cell) cells labeling Cytokeratin 13 with **ab92551** at 1/500 (4 µg/mL). Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/mL) was used to counterstain the cells. **ab150077** AlexaFluor®488 Goat anti-Rabbit at 1/1000 (2 µg/mL) was used as the secondary antibody. DAPI (blue) was used as nuclear counterstain.

Confocal image showing cytoplasmic staining in A431 cells.

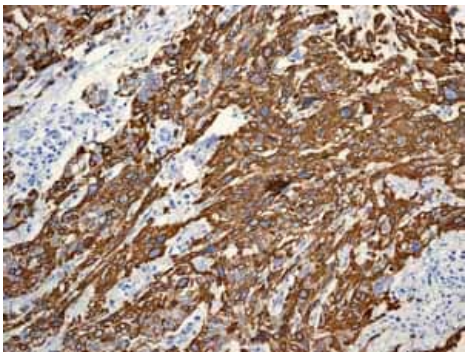
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).



Flow Cytometry (Intracellular) - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling Cytokeratin 13 with purified **ab92551** at 1/20 dilution (red). The secondary antibody was Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution. A Rabbit monoclonal IgG (Black) was used as the isotype control and cells without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.

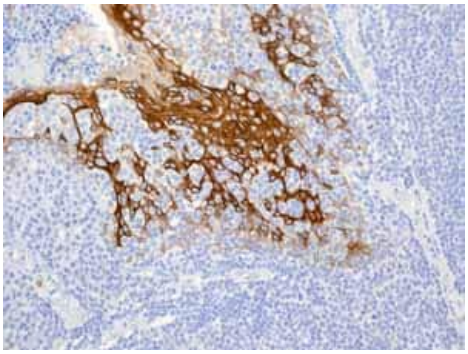
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

ab92551 showing positive staining in human Cervical carcinoma tissue. Antigen retrieval was heat mediated via the pressure cooker method before commencing with IHC staining protocol.

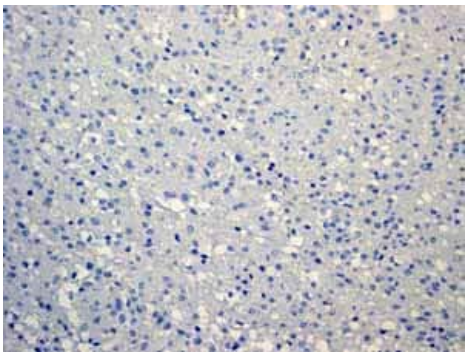
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

ab92551 showing positive staining in Normal human tonsil squamous cells tissue. Antigen retrieval was heat mediated via the pressure cooker method before commencing with IHC staining protocol.

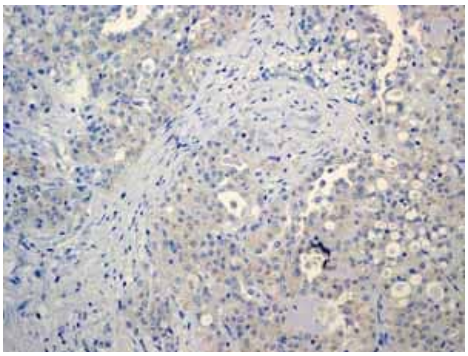
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

ab92551 showing negative staining in human Glioma tissue. Antigen retrieval was heat mediated via the pressure cooker method before commencing with IHC staining protocol.

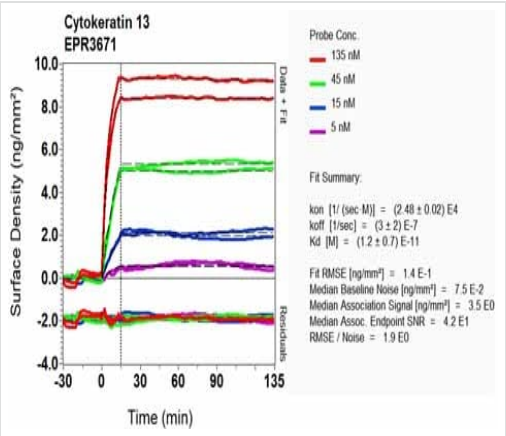
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

ab92551 showing negative staining in human Breast carcinoma tissue. Antigen retrieval was heat mediated via the pressure cooker method before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).



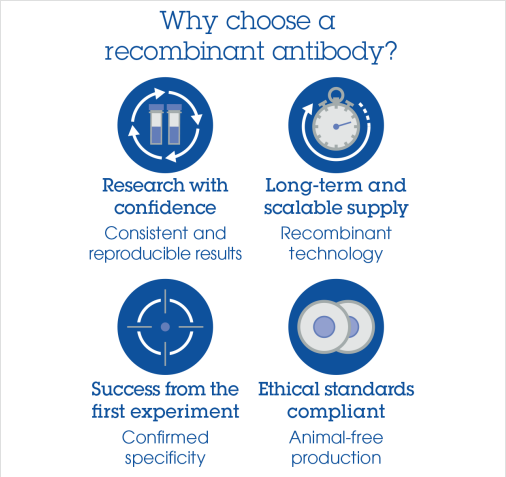
OI-RD Scanning - Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92551**).



Anti-Cytokeratin 13 antibody [EPR3671] - BSA and Azide free (ab239918)

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