

Product datasheet

Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] ab86734

Recombinant

★★★★★ [11 Abreviews](#) [49 References](#) [8 Images](#)

Overview

Product name	Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3]
Description	Mouse recombinant multiclonal [AE1/AE3 + 5D3] to pan Cytokeratin
Host species	Mouse
Specificity	The ab86734 is a combination of [AE1/AE3] and [5D3] clones and can be used to detect most human epithelia. [AE1/AE3] recognizes acidic and basic subfamilies of cytokeratins, with molecular weights ranging from 40 to 67 kDa. [5D3] recognizes Cytokeratin 8 and 18 intermediate filament proteins. In normal tissues, [5D3] recognizes all simple and glandular epithelium. It has been observed that [AE1/AE3] has had problems marking certain tissues types and adenocarcinomas. The addition of [5D3] may remedy some of the limitations observed when staining with [AE1/AE3] alone.
Tested applications	Suitable for: Flow Cyt, ICC/IF, IHC-P
Species reactivity	Reacts with: Goat, Chicken, Dog, Human, Pig
Immunogen	Full length protein corresponding to pan Cytokeratin.
Positive control	Skin or adenocarcinoma This antibody gave a positive result when used in the following formaldehyde fixed cell lines: HepG2.
General notes	<p>This product was changed from ascites to tissue culture supernatant on 8th March 2018. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>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.</p> <p>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</p> <p>Please note that this antibody is an oligoclonal antibody. It is a cocktail of monoclonal antibodies that have been carefully selected. Oligoclonal antibodies have not only the specificity and batch-to-batch consistency of a monoclonal antibody, but also have the advantage of the sensitivity of a polyclonal antibody due to their ability to recognize multiple epitopes on an antigen.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Buffer with protein carrier
Purity	Protein A/G purified
Clonality	Recombinant Multiclonal
Clone number	AE1/AE3 + 5D3
Isotype	IgG1

Applications

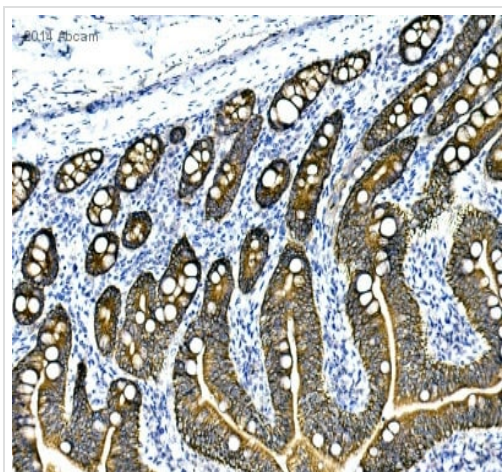
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab86734 in the following tested applications.

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

Application	Abreviews	Notes
Flow Cyt		1/100. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (1)	1/100.
IHC-P	★★★★★ (9)	Use at an assay dependent concentration.

Target

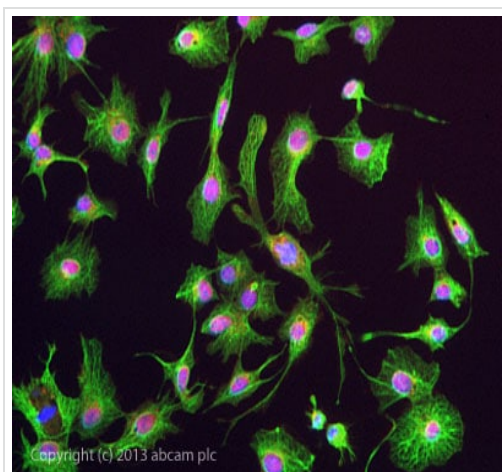
Relevance	Cytokeratins, a group comprising at least 29 different proteins, are characteristic of epithelial and trichocytic cells. Cytokeratins 1, 4, 5, 6, and 8 are members of the type II neutral to basic subfamily. Monoclonal anti cytokeratins are specific markers of epithelial cell differentiation and have been widely used as tools in tumor identification and classification. Monoclonal Anti Pan Cytokeratin is a broadly reactive reagent, which recognizes epitopes present in most human epithelial tissues. It facilitates typing of normal, metaplastic and neoplastic cells. Synergy between the various components results in staining amplification. This enables identification of cells, which would otherwise be stained only marginally. The mixture may aid in the discrimination of carcinomas and nonepithelial tumors such as sarcomas, lymphomas and neural tumors. It is also useful in detecting micrometastases in lymph nodes, bone marrow and other tissues and for determining the origin of poorly differentiated tumors. There are two types of cytokeratins the acidic type I cytokeratins and the basic or neutral type II cytokeratins. Cytokeratins are usually found in pairs comprising a type I cytokeratin and a type II cytokeratin. Usually the type II cytokeratins are 8kD larger than their type I counterparts.
Cellular localization	Cytoplasmic



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] (ab86734)

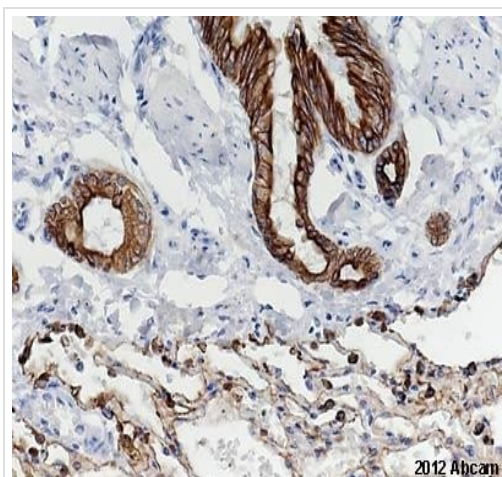
This image is courtesy of an Abreview submitted by Carl Hobbs

ab86734 staining pan Cytokeratin in pig small intestine tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 1% BSA for 10 minutes at 21°C; antigen retrieval was by heat mediation in citric acid. Samples were incubated with primary antibody (1/250 in TBS/BSA/azide) for 2 hours at 21°C. A Biotin-conjugated goat anti-mouse IgG polyclonal (1/200) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] (ab86734)

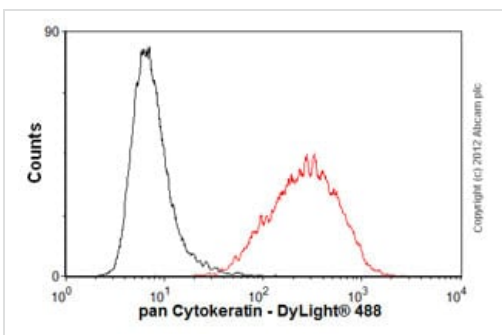
ab86734 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab86734 at 1/100 dilution overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- mouse (**ab96879**) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in methanol fixed (100%, 5min) HeLa, Hek293, HepG2, and MCF-7 cells, also in formaldehyde fixed (4%, 10min) HeLa, Hek293, and MCF-7 cells at 1/100 dilution.



Formaldehyde fixed dog lung tissue stained for pan Cytokeratin with ab86734 at a 1/250 dilution. Heat mediated - Buffer/Enzyme Used: Citric acid. 1% BSA used for blocking for 10 minutes at RT. Primary incubation for 2 hours at RT in TBS/BSA/Azide. Secondary: Goat polyclonal conjugated to biotin used at a 1/200 dilution.

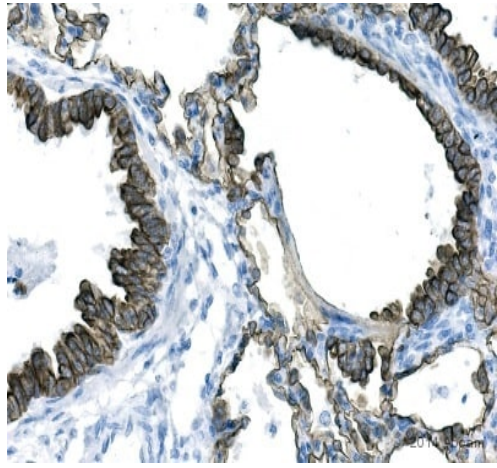
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] (ab86734)

Mr Carl Hobbs



Flow Cytometry - Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] (ab86734)

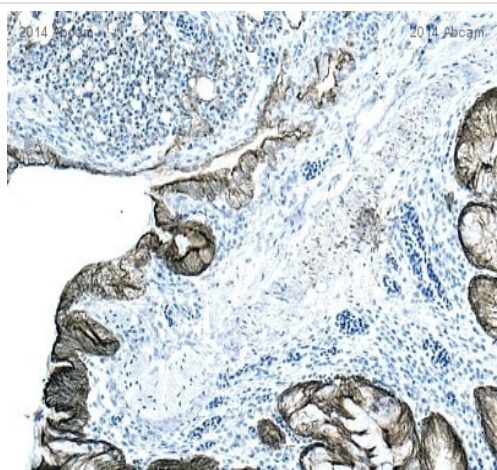
Overlay histogram showing A431 cells stained with ab86734 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab86734, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [CIGG1] ([ab91353](#), 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] (ab86734)

Mr Carl Hobbs

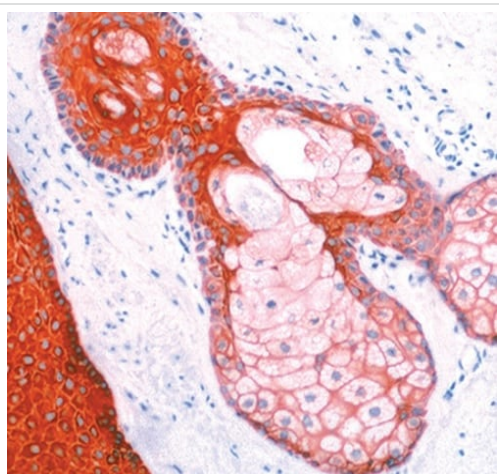
Formaldehyde fixed goat lung tissue stained for pan Cytokeratin with ab86734 at a 1/250 dilution. Heat mediated - Buffer/Enzyme Used: Citric acid. 1% BSA used for blocking for 10 minutes at RT. Primary incubation for 2 hours at RT in TBS/BSA/Azide. Secondary: Goat polyclonal conjugated to biotin used at a 1/200 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] (ab86734)

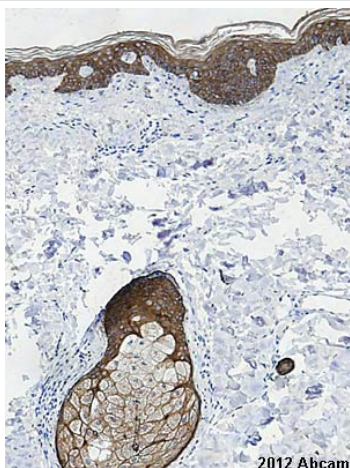
Mr Carl Hobbs

Formaldehyde fixed chicken lung tissue stained for pan Cytokeratin with ab86734 at a 1/200 dilution. Heat mediated - Buffer/Enzyme Used: Citric acid. 1% BSA used for blocking for 10 minutes at RT. Primary incubation for 16 hours at RT in TBS/BSA/Azide. Secondary: Goat polyclonal conjugated to biotin used at a 1/200 dilution.



Skin stained for pan Cytokeratin with ab86734 at a 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] (ab86734)



ab8673 staining human skin sections by IHC-P. The tissue was fixed with formaldehyde and a heat mediated antigen retrieval step was performed with citric acid pH 6. Blocking of the sample was done with 1% BSA for 10 minutes at 21°C, followed by staining with **ab8673** at 1/250 in TBS/BSA/azide for 2h at 21°C. A biotinylated goat anti-mouse polyclonal antibody at 1/200 was used as the secondary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [AE1/AE3 + 5D3] (ab86734)

This image is courtesy of an Abreview submitted by Carl Hobbs

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors