

Product datasheet

Anti-pan Cytokeratin antibody [AE1/AE3] - BSA and Azide free ab80826

★★★★★ [2 Abreviews](#) [15 References](#) [7 Images](#)

Overview

Product name	Anti-pan Cytokeratin antibody [AE1/AE3] - BSA and Azide free
Description	Mouse monoclonal [AE1/AE3] to pan Cytokeratin - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: Flow Cyt, ICC/IF, IHC-P, Mass Cytometry
Species reactivity	Reacts with: Human
Immunogen	Full length native protein (purified) corresponding to Human pan Cytokeratin.
Positive control	IHC: Skin. Lung carcinoma, human tonsil tissue ICC: HepG2 cell line IMC: human lung cancer
General notes	<p>This product was changed from ascites to tissue culture supernatant on 12th June 2019. 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>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein G purified
Clonality	Monoclonal
Clone number	AE1/AE3

Isotype

IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab80826 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		Use at an assay dependent concentration. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
IHC-P	★★★★★ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Boiling tissue sections in 1mM EDTA (pH 8.0), for 10-20min followed by cooling at RT for 20min is required.
Mass Cytometry	★★★★★ (1)	Use at an assay dependent concentration.

Target

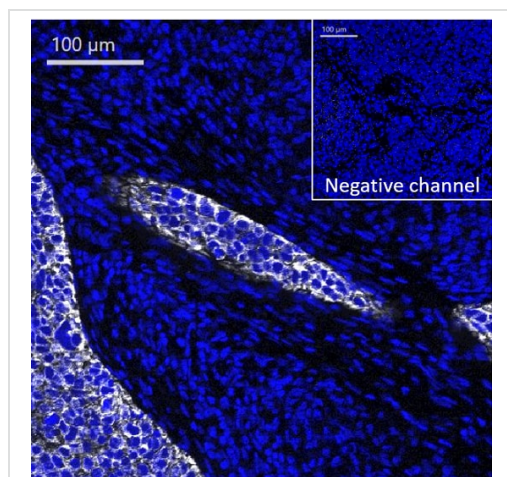
Relevance

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

Images

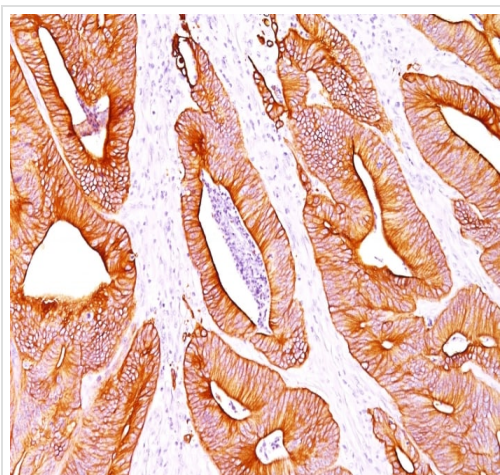


Mass Cytometry - Anti-pan Cytokeratin antibody
[AE1/AE3] - BSA and Azide free (ab80826)

This image is courtesy of the Single Cell & Imaging
Mass Cytometry Analysis Platform, Goodman Cancer
Research Centre, McGill University

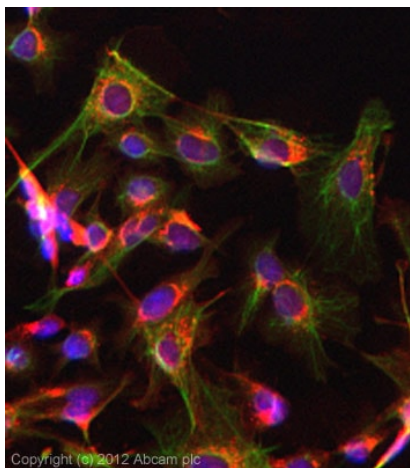
Imaging Mass Cytometry™ (IMC™) image of human lung cancer tissue stained with Anti-pan Cytokeratin antibody [AE1/AE3]. ab80826 (carrier-free antibody, purified) was metal-conjugated using a Maxpar® Antibody Labeling Kit from Fluidigm. Immunostaining was performed according to Fluidigm's protocols. Briefly, slides were subject to deparaffinization and heat-induced epitope retrieval, followed by overnight incubation at 4°C with an antibody cocktail containing metal-tagged antibodies in blocking buffer. Slides were subsequently washed with 0.2% Triton-X and 1x PBS, counterstained with Cell-ID™ Intercalator-Ir diluted at 1/400 in 1x PBS for 30 min at room temperature, rinsed for 5 min with distilled H₂O, and air-dried prior to IMC™ acquisition. IMC™ acquisition was performed using the Fluidigm Hyperion™ Imaging System.

Imaging Mass Cytometry™, IMC™, Cell-ID™, Hyperion™ and Maxpar® are trademarks of Fluidigm Canada



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-pan Cytokeratin antibody
[AE1/AE3] - BSA and Azide free (ab80826)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human colon carcinoma tissue with ab80826.



Immunocytochemistry/ Immunofluorescence - Anti-pan Cytokeratin antibody [AE1/AE3] - BSA and Azide free (ab80826)

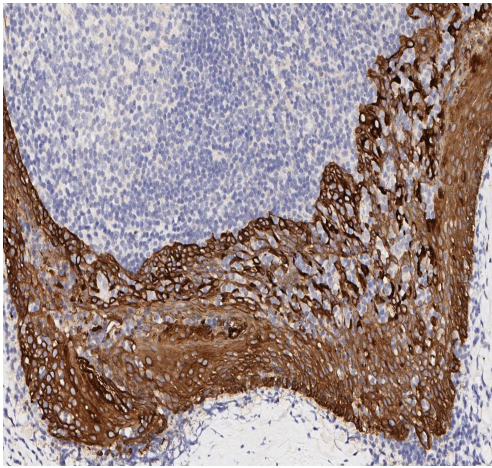
ICC/IF image of ab80826 stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab80826, 5µg/ml) overnight at +4°C. The secondary antibody (green) was [ab96879](#), DyLight® 488 goat anti-mouse 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 image was generated using the ascites version of the product.

Flow Cytometry - Anti-pan Cytokeratin antibody [AE1/AE3] - BSA and Azide free (ab80826)

Overlay histogram showing A431 cells stained with ab80826 (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 (ab80826, 1µg/1x10⁶ cells) 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 [ICIGG1] ([ab91353](#), 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

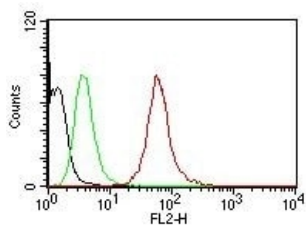
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [AE1/AE3] - BSA and Azide free (ab80826)

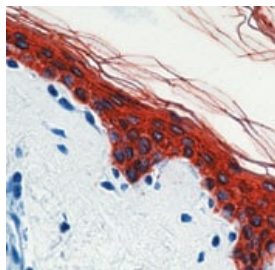
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human tonsil tissue with ab80826 at 1/400 dilution. Anti-Mouse HRP polymer was used as the secondary detection system. Heat-mediated antigen retrieval was performed using citrate based pH 6.0 buffer.

This image was generated using the ascites version of the product.



Flow Cytometry - Anti-pan Cytokeratin antibody [AE1/AE3] - BSA and Azide free (ab80826)

Flow Cytometry analysis of HeLa cells labeling pan Cytokeratin with ab80826 (red). Cells without primary incubation (black) and Isotype Control (green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [AE1/AE3] - BSA and Azide free (ab80826)

Immunohistochemistry analysis of formalin-fixed, paraffin-embedded Human skin tissue using 1/50 ab80826, a peroxidase-conjugated secondary antibody and an AEC chromogen. Note cytoplasmic staining of epithelial cells.

This image was generated using the ascites version of the product.

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