

## Alexa Fluor® 488 anti-Pan-Cytokeratin Antibody

<b>Catalog# / Size</b>	914213 / 25 µg 914214 / 100 µg
<b>Clone</b>	AE-1/AE-3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	KRT, Pan-Cytokeratin (AE-1/AE-3), AE1/AE3, AE 1+AE 3, cytokeratin, P04264
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	AE-1 immunoreacts with an antigenic determinant present on most of the subfamily A cytokeratins, including cytokeratins with molecular weights of 56.5, 50, 48 and 40 kD. AE-3 reacts with an antigenic determinant shared by the subfamily B cytokeratins including cytokeratins with molecular weights of 64, 59, 58, 56, and 52 kD.

### Product Details

---

<b>Verified Reactivity</b>	Human, Rat
<b>Reported Reactivity</b>	Dog, Non-Human Primate
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	This antibody was developed using human epidermal keratins.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal conditions.
<b>Concentration</b>	0.5 mg/mL
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">IHC-P - Quality tested</a> <a href="#">ICC, ICFC - Verified</a>
<b>Recommended Usage</b>	<p>Each lot of this antibody is quality control tested by formalin-fixed paraffin-embedded immunohistochemical staining. For immunohistochemistry, a concentration range of 1-10 µg/mL is suggested. For immunocytochemistry, a concentration range of 1 - 10 µg/mL is recommended. For flow cytometric staining using our Cyto-Fast™ Fix/Perm Buffer Set, the suggested use of this reagent is ≤ 0.125 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p>
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>Additional Product Notes</b>	<p>For use of this antibody (clone AE-1/AE-3) in immunocytochemistry (ICC), we recommend fixation with Fixation Buffer (Cat. No. 420801) followed by permeabilization with either 0.5% Triton-X or 100% ice-cold methanol, or fixation/permeabilization with 100% ice-cold methanol alone.</p> <p>For use of this antibody (clone AE-1/AE-3) in intracellular flow cytometry (ICFC), we recommend fixation/permeabilization using Cyto-Fast™ Fix/Perm Buffer Set (Cat. No. 426803).</p> <p>For use of this antibody (clone AE-1/AE-3) in immunohistochemistry (IHC), we recommend antigen retrieval with either Sodium Citrate H.I.E.R. (Cat. No. 928502) or Tris-EDTA pH 9.0 Antigen Retrieval Buffer (Cat. No. 422703).</p>
<b>RRID</b>	AB_3675198 (BioLegend Cat. No. 914213) AB_3675198 (BioLegend Cat. No. 914214)

### Antigen Details

---

<b>Distribution</b>	Cytoplasm, cell membrane
---------------------	--------------------------

<b>Function</b>	Cytoskeleton, cell motility and structure
<b>Biology Area</b>	Cell Biology, Cell Motility/Cytoskeleton/Structure, Neuroscience, Neuroscience Cell Markers
<b>Molecular Family</b>	Intermediate Filaments

**Antigen References**

1. Metcalf KJ, *et al.* 2022. *Matrix Biol Plus.* 14:100105.
2. Jiang S, *et al.* 2022. *Immunity.* 55:1118.
3. Tiago M, *et al.* 2020. *Br J Cancer.* 122:789.
4. Kou R, *et al.* 2018. *Oncol Rep.* 2537-44
5. Xie S, *et al.* 2020. *Ann Transl Med.* 1.384027778.
6. Chang TH, *et al.* 2020. *Cell Death Dis.* 11:338.
7. Kennedy-Darling J, *et al.* 2021. *Eur J Immunol.* 51:1262-77.
8. Cai S, *et al.* 2022. *iScience.* 25:104980.

**Gene ID** NA

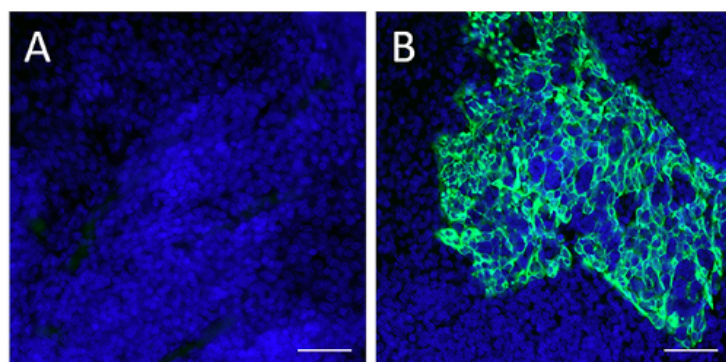
**Related Protocols**

- [Immunocytochemistry Staining Protocol](#)
- [Intracellular Flow Cytometry Staining Protocol](#)
- [Immunohistochemistry Protocol for Paraffin-Embedded Sections](#)

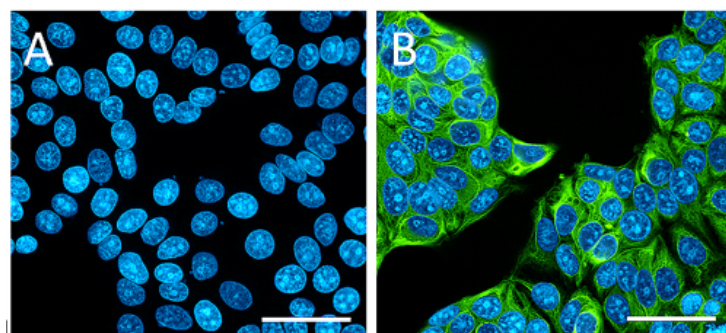
**Other Formats**

Purified anti-Pan-Cytokeratin, Alexa Fluor® 594 anti-Pan-Cytokeratin, TotalSeq™-Bn1301 anti-Pan-Cytokeratin, PerCP/Cyanine5.5 anti-Pan-Cytokeratin, Alexa Fluor® 647 anti-Pan-Cytokeratin Antibody, Alexa Fluor® 488 anti-Pan-Cytokeratin

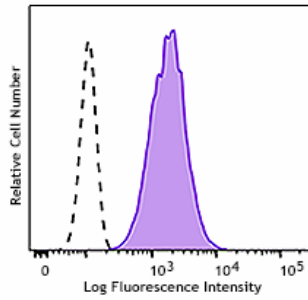
**Product Data**



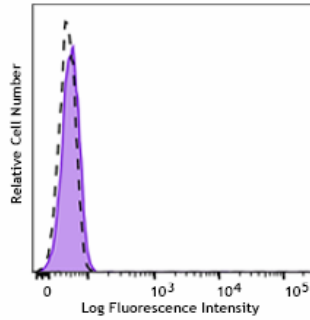
IHC staining of Alexa Fluor® 488 anti-Pan Cytokeratin (clone AE-1/AE-3) on formalin-fixed paraffin-embedded human tonsil tissue. Following antigen retrieval using 1X Tris-EDTA pH 9.0 Antigen Retrieval Buffer (Cat. No. 422704), the tissue was incubated either without (panel A) or with (panel B) Alexa Fluor® 488 anti-Pan Cytokeratin (clone AE-1/AE-3). Nuclei were counterstained with DAPI (Cat. No. 422801). Images were captured with a 40X objective and merged. Scale bar: 50 µm



MCF7 cells were fixed and permeabilized with 100% ice-cold methanol and blocked with 5% FBS for 60 minutes. Cells were then intracellularly stained with Alexa Fluor® 488 mouse IgG1, κ isotype control (Cat No. 400134) (panel A) or Alexa Fluor® 488 anti-Pan-Cytokeratin (clone AE-1/AE-3) (panel B) overnight at 4°C. Nuclei were counterstained with DAPI and the image was captured with a 60X objective. Scale: 50 µm



MCF-7 cells (positive cell line, filled histogram) were fixed and permeabilized using Cyto-Fast™ Fix/Perm Buffer Set (Cat. No. 426803) and intracellularly stained with Alexa Fluor® 488 Pan-Cytokeratin (clone AE-1/AE-3) or Alexa Fluor® 488 Mouse IgG1, κ (open histogram, dashed line) (Cat No. 400134).



Jurkat cells (negative cell line, filled histogram) were fixed and permeabilized using Cyto-Fast™ Fix/Perm Buffer Set (Cat. No. 426803) and intracellularly stained with Alexa Fluor® 488 Pan-Cytokeratin (clone AE-1/AE-3) or Alexa Fluor® 488 Mouse IgG1, κ (open histogram, dashed line) (Cat No. 400134).

For Research Use Only. Not for diagnostic or therapeutic use.

This product is supplied subject to the terms and conditions, including the limited license, located at [www.biolegend.com/terms](http://www.biolegend.com/terms) ("Terms") and may be used only as provided in the Terms. Without limiting the foregoing, BioLegend products may not be used for any Commercial Purpose as defined in the Terms, resold in any form, used in manufacturing, or reverse engineered, sequenced, or otherwise studied or used to learn its design or composition without express written approval of BioLegend. Regardless of the information given in this document, user is solely responsible for determining any license requirements necessary for user's intended use and assumes all risk and liability arising from use of the product. BioLegend is not responsible for patent infringement or any other risks or liabilities whatsoever resulting from the use of its products.

BioLegend, the BioLegend logo, and all other trademarks are property of BioLegend, Inc. or their respective owners, and all rights are reserved.

8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587