

## 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

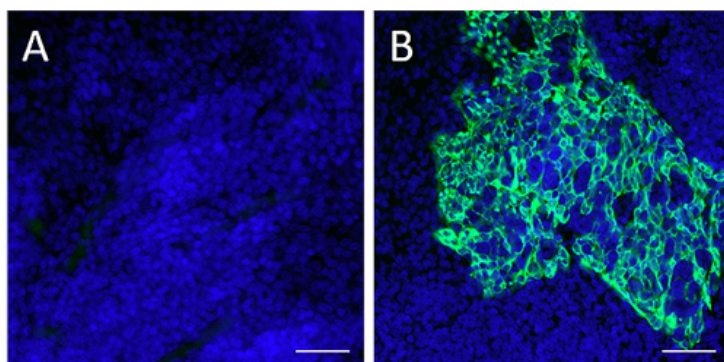
**Related Protocols**

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

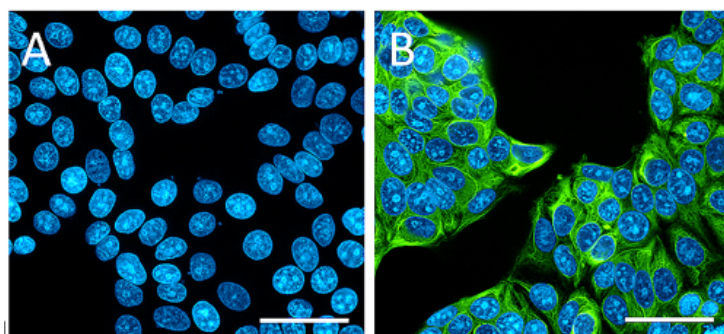
**Other Formats**

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

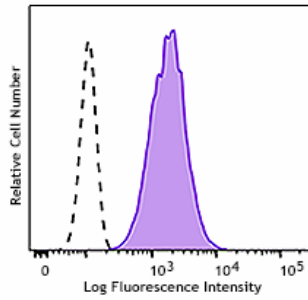
**Product Data**



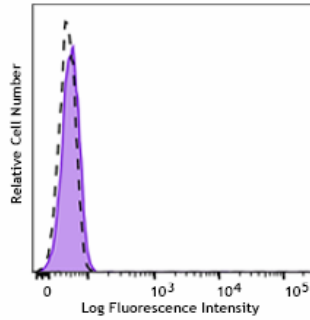
IHC staining of Alexa Fluor® 488 anti-Pan Cytokeratin (clone AE-1/AE-3) on formalin-fixed paraffin-embedded human tonsil tissue. Following antigen retrieval using 1X Tris-EDTA pH 9.0 Antigen Retrieval Buffer (Cat. No. 422704), the tissue was incubated either without (panel A) or with (panel B) Alexa 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).

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