Alexa Fluor® 647 anti-Pan-Cytokeratin Antibody

Catalog# / Size	914211 / 25 µg 914212 / 100 µg
Clone	AE-1/AE-3
Regulatory Status	RUO
Other Names	Pan-Cytokeratin (AE-1/AE-3), AE1/AE3
Isotype	Mouse IgG1, κ
Description	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 of 64, 59, 58, 56, and 52 kD.

Product Details

Verified Reactivity	Human, Rat
Reported Reactivity	Dog, Non-Human Primate
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	This antibody was developed using human epidermal keratins.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	IHC-P - Quality tested ICC, ICFC - Verified
Recommended Usage	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 ≤ 0.06 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Additional Product Notes	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. 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). 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).
RRID	AB_3675197 (BioLegend Cat. No. 914211) AB_3675197 (BioLegend Cat. No. 914212)

Antigen Details

Distribution	Cytoplasm, cell membrane
Function	Cytoskeleton, cell motility and structure
Biology Area	Cell Biology, Cell Motility/Cytoskeleton/Structure, Neuroscience, Neuroscience Cell Markers
Molecular Family	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*. 7:2013. 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. 8. Cai S, *et al.* 2022. *iScience*. 25:104980.
Gene ID	NA

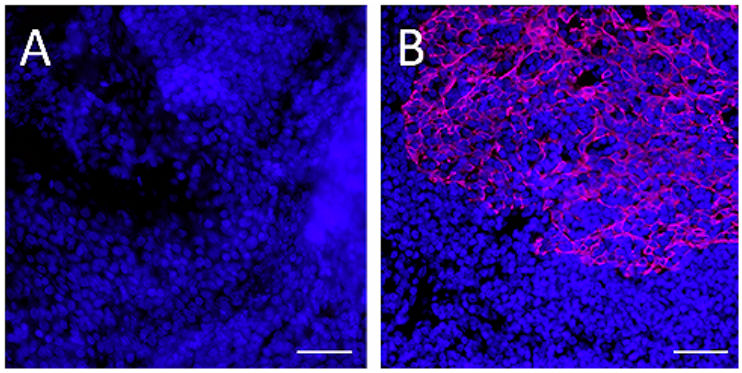
Related Protocols

- Immunocytochemistry Staining Protocol
- Intracellular Flow Cytometry Staining Protocol
- Immunohistochemistry Protocol for Paraffin-Embedded Sections

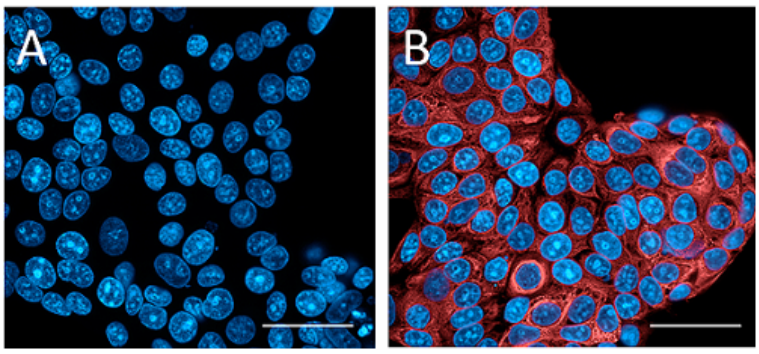
Other Formats

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

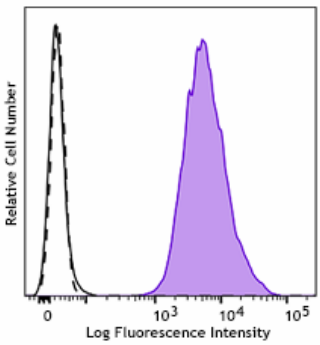
Product Data



IHC staining of Alexa Fluor® 647 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® 647 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® 647 mouse IgG1, κ Isotype Control (Cat No. 400130) (panel A) or Alexa Fluor® 647 anti-Pan-Cytokeratin (clone AE-1/AE-3) (panel B) overnight at 4°C. Nuclei were counterstained with DAPI (Cat. No. 422801) and the image was captured with a 60X objective. Scale bar: 50 µm



MCF-7 cells (positive cell line, filled histogram) and Jurkat cells (negative cell line, open histogram) were fixed and permeabilized using Cyto-Fast™ Fix/Perm Buffer Set (Cat. No. 426803) and intracellularly stained with Alexa Fluor® 647 anti-Pan-Cytokeratin (clone AE-1/AE-3) or Alexa Fluor® 647 Mouse IgG1, κ Isotype Control (open histogram, dashed line is representative for both MCF-7 and Jurkat cells) (Cat No. 400136).

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