Alexa Fluor® 488 anti-Cytokeratin (pan reactive) Antibody

Catalog# / Size	628608 / 100 µg
Clone	C-11
Regulatory Status	RUO
Other Names	Cytokeratin, Keratin
Isotype	Mouse IgG1, κ
Description	Cytokeratins are intermediate filament proteins that are widely expressed in many tissues. These proteins are vital components of the cytoskeleton and interact with a number of other proteins. Cytokeratins are usually found in the cytoplasm,although some cytokeratins can be found in the nucleus and the nucleolus.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Keratin enriched fraction from human epidermoid carcinoma.
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® 488 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	ICC - *Quality tested* IHC-P - *Verified*
Recommended Usage	Each lot of this antibody is quality control tested by immunocytochemistry. For immunocytochemistry, a concentration range of 1.25 - 5.0 µg/ml is recommended. For immunohistochemical staining on formalin-fixed paraffin-embedded tissue sections, a concentration range of 5.0 - 10 µg/ml is suggested. 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. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Blue Laser (488 nm)
Application Notes	The C-11 monoclonal antibody reacts with a conserved epitope of human cytokeratin 4, 5, 6, 8, 10, 13, and 18. This antibody has been shown to be useful for Western blotting and has also been reported to be useful for immunoprecipitation, immunohistochemistry (paraffin sections), immunocytochemistry, and spatial biology (IBEX)[7,8].

Application References

(PubMed link indicates BioLegend citation)

1. Kovarik J. 1988. *Int. J. Cancer Suppl.* 3:50.
2. Bartek J, *et al.* 1991. *J. Pathol.* 164:215.
3. Chernyavsky A I, 2007. *J. Biol. Chem.* doi:10.1074/jbc.M611365200. PubMed
4. Comito G, *et al.* 2012. *Cancer Lett.* 324:31. PubMed
5. Vojt-òsek B, *et al.* 1989. *Folia Biol (Praha).* 35:373. (reactivity with rat, dog, sheep, pig, cow)
6. Dekaney CM, *et al.* 2005. *Gastroenterology* 129:1567. (ICC)
7. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) PubMed
8. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) PubMed

Product Citations

1. Bordignon P *et al.* 2019. Cell Rep. 28(9):2358-2372 . PubMed
2. Jarosch S, *et al.* 2022. STAR Protoc. 3:101374. PubMed
3. Yee–de León JF, *et al.* 2020. Sci Rep. 5.654861111. PubMed
4. Alzubi MA, *et al.* 2019. Breast Cancer Res. 21:36. PubMed
5. Soto-Pantoja DR, *et al.* 2021. Cancer Res. 81:3890. PubMed
6. Potter DS, *et al.* 2021. Cell Death Dis. 12:741. PubMed
7. Aguilar–Avelar C, *et al.* 2019. Sci Rep. 9:13766. PubMed

RRID AB_2616664 (BioLegend Cat. No. 628608)

Antigen Details

Structure Intermediate filament protein, contains three coiled-coil domains. Cytokeratins exist as heterotetramers composed of two type I and two type II keratin subunits

Distribution Cytokeratins are widely expressed proteins usually found in the cytoplasm although some cytokeratins can also be found in the nucleus and the nucleolus

Function Intermediate filament protein involved with the cytoskeleton.

Interaction Most cytokeratins interact with a number of other proteins such as 14-3-3, EGF receptor, and many others

Biology Area Cell Biology, Cell Motility/Cytoskeleton/Structure, Neuroscience, Neuroscience Cell Markers

Molecular Family Intermediate Filaments

Gene ID 3875

Related Protocols

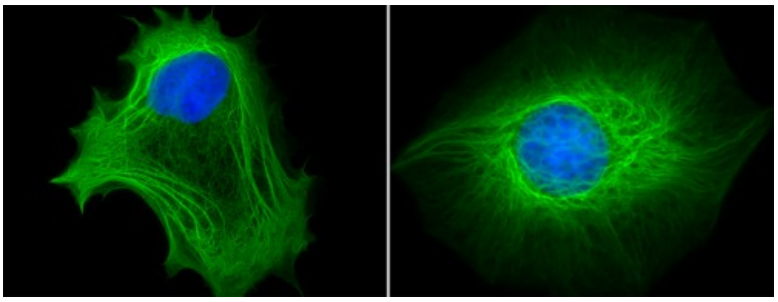
Immunocytochemistry Staining Protocol

Immunohistochemistry Protocol for Paraffin-Embedded Sections

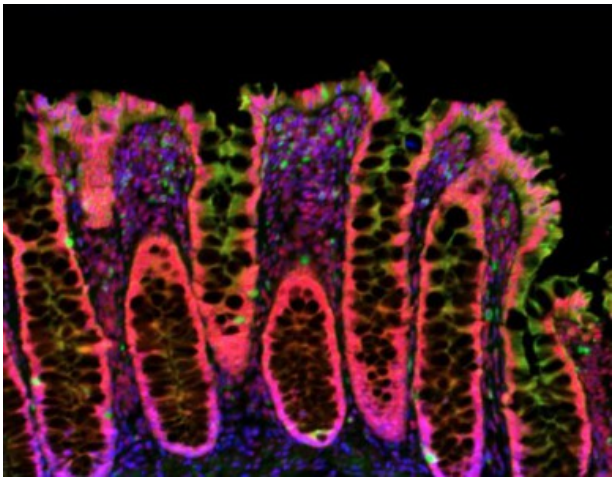
Other Formats

Purified anti-Cytokeratin (pan reactive), Alexa Fluor® 647 anti-Cytokeratin (pan reactive), Alexa Fluor® 594 anti-Cytokeratin (pan reactive), Alexa Fluor® 488 anti-Cytokeratin (pan reactive)

Product Data



MCF-7 mammary adenocarcinoma cells were fixed, permeabilized and blocked according to standard protocols. The cells were stained with anti-Cytokeratin (pan reactive) (clone C-11) Alexa Fluor® 488 (green) antibody. Nuclei were counterstained with DAPI (blue).



Human paraffin-embedded colon tissue slices were prepared with a standard protocol of deparaffination, rehydration, antigen retrieval, and blocking. Tissue was stained with anti-Pan Cytokeratin (clone C-11) Alexa Fluor® 488 (green) antibody and anti-mouse/human CD44 (clone IM7) Alexa Fluor® 594 (red) antibody. Nuclei were counterstained with DAPI (blue). Expanded protocol available by following the Additional Data link.

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