

Alexa Fluor® 488 anti-Cytokeratin 19 Antibody

Catalog# / Size	628508 / 100 µg
Clone	A53-B/A2
Regulatory Status	RUO
Other Names	Keratin 19, Keratin 19 type 1 cytoskeletal
Isotype	Mouse IgG2a, κ
Description	

Cytokeratin 19, also known as keratin 19, is a type I intermediate filament protein with a molecular weight of approximately 40-44 kD. Cytokeratin 19 is a heterotetramer composed of two type I and two type II keratin subunits. Unlike other cytokeratins, cytokeratin 19 lacks a C-terminal non-helical extension. This cytokeratin is widely expressed in the periderm (transient superficial layer enveloping developing epidermis), muscle, intestine, bile duct, esophagus, stomach, and thymus. Cytokeratin 19 can be upregulated by vitamin A and is thought to play a critical role in embryogenesis. Cytokeratin 19 interacts with the pinin protein and has been shown to be modified by phosphorylation (Ser10, Ser35).

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human mammary carcinoma cell line MCF-7
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
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunocytochemistry. For immunocytochemistry, a concentration range of 0.1 - 10 µg/ml is recommended. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* 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>View full statement regarding label licenses</p>
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation, immunohistochemistry of paraffin-embedded sections, immunocytochemistry, and ELISA.
Application References	
(PubMed link indicates BioLegend citation)	<ol style="list-style-type: none">1. Karsten U, <i>et al.</i> 1985. <i>Eur. J. Cancer Clin. Oncol.</i> 21:733.2. Nishikata T, <i>et al.</i> Anticancer Res. 33:2867. PubMed
RRID	AB_2566632 (BioLegend Cat. No. 628508)

Antigen Details

Structure	Type I intermediate filament protein, contains three coiled-coil domains, lacks C-terminal non-helical extension found in other keratins, approximately 40-44 kD. Cytokeratin 19 is a heterotetramer composed of two type I and two type II keratin subunits.
Distribution	Expressed in the periderm (transient superficial layer enveloping developing epidermis), also expressed in muscle, intestine, bile duct, esophagus, stomach, and thymus. Upregulated by vitamin A.
Function	Intermediate filament protein involved with the cytoskeleton. May play a critical role in embryogenesis
Interaction	Interacts with pinin
Modification	Phosphorylation (Ser10, Ser35)
Biology Area	Cell Biology, Cell Motility/Cytoskeleton/Structure, Neuroscience, Neuroscience Cell Markers
Molecular Family	Intermediate Filaments
Antigen References	1. Bader BL, <i>et al.</i> 1986. <i>EMBO J.</i> 5:1865. 2. Eckert RL. 1988. <i>Proc. Natl. Acad. Sci.</i> 85:1114. 3. Stasiak PC and Lane EB. 1987 <i>Nucleic Acids Res.</i> 15:10058.
Gene ID	3880

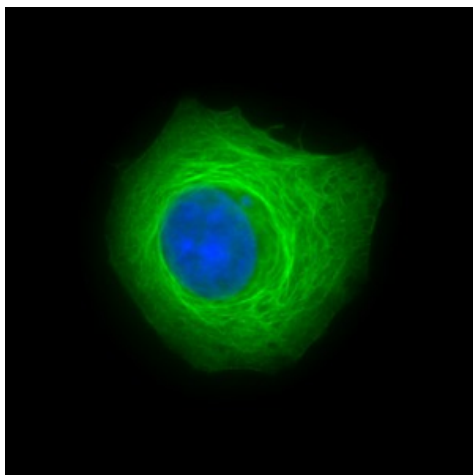
Related Protocols

[Immunocytochemistry Staining Protocol](#)

Other Formats

Purified anti-Cytokeratin 19, Alexa Fluor® 594 anti-Cytokeratin 19, Alexa Fluor® 647 anti-Cytokeratin 19, Alexa Fluor® 488 anti-Cytokeratin 19, Direct-Blot™ HRP anti-Cytokeratin 19

Product Data



MCF-7 cells were fixed with 1% paraformaldehyde (PFA) for ten minutes at 37°C, permeabilized with 0.5% Triton X-100 buffer for ten minutes at room temperature, blocked for 30 minutes at room temperature with 5% fetal bovine serum (FBS), then stained with 5 µg/mL anti-Cytokeratin 19 (clone A53-B/A2) Alexa Fluor® 488 (green). Nuclei were counterstained with DAPI (blue). Images were acquired with a 60X objective.

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