

## Product datasheet

# Alexa Fluor® 488 Anti-Cytokeratin 19 antibody [EP1580Y] $\alpha$ b192643

KO VALIDATED Recombinant RabMAb

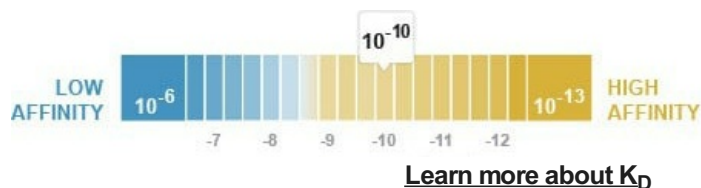
★★★★☆ 1 Abreviews 5 Images

### Overview

Product name	Alexa Fluor® 488 Anti-Cytokeratin 19 antibody [EP1580Y]
Description	Alexa Fluor® 488 Rabbit monoclonal [EP1580Y] to Cytokeratin 19
Host species	Rabbit
Conjugation	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
Tested applications	<b>Suitable for:</b> Flow Cyt (Intra), ICC/IF
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	ICC/IF: HeLa. ICC/IF KO: MCF7 cells (MCF7-KRT19 KO used as a negative cell line). Flow Cyt (intra): HeLa cells.
General notes	<p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>.</p> <p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 3.70 x 10 <sup>-10</sup> M



<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP1580Y
<b>Isotype</b>	IgG

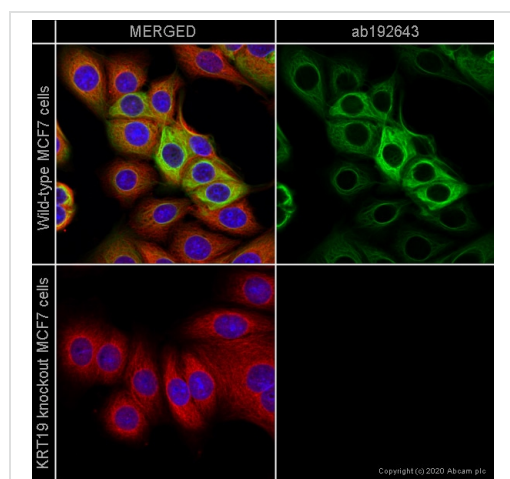
## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab192643 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.
ICC/IF		1/100. Signal can be observed in cells fixed with either methanol or paraformaldehyde.

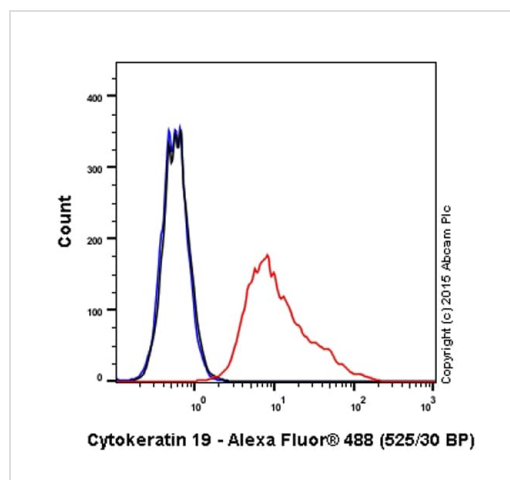
## Target

<b>Function</b>	Involved in the organization of myofibers. Together with KRT8, helps to link the contractile apparatus to dystrophin at the costameres of striated muscle.
<b>Tissue specificity</b>	Expressed in a defined zone of basal keratinocytes in the deep outer root sheath of hair follicles. Also observed in sweat gland and mammary gland ductal and secretory cells, bile ducts, gastrointestinal tract, bladder urothelium, oral epithelia, esophagus, ectocervical epithelium (at protein level). Expressed in epidermal basal cells, in nipple epidermis and a defined region of the hair follicle. Also seen in a subset of vascular wall cells in both the veins and artery of human umbilical cord, and in umbilical cord vascular smooth muscle. Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma in structures that contain dystrophin and spectrin.
<b>Sequence similarities</b>	Belongs to the intermediate filament family.
<b>Developmental stage</b>	Present in hair follicles at all stages of development.
<b>Domain</b>	This keratin differs from all other IF proteins in lacking the C-terminal tail domain.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Cytokeratin 19 antibody [EP1580Y] (ab192643)

Immunofluorescence staining of Cytokeratin 19 in wild-type MCF7 cells (top panel) and KRT19 knockout MCF7 cells (bottom panel) using ab192643. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab192643 at 1/500 dilution (shown in green) and [ab195884](#) (Rat monoclonal to Tubulin - Alexa Fluor® 647) at 1/100 dilution (shown in red) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



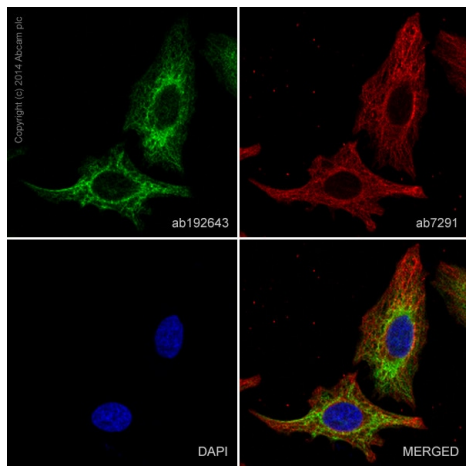
Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Cytokeratin 19 antibody [EP1580Y] (ab192643)

Flow Cytometry analysis of Cytokeratin-19 in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells stained with ab192643 (red line).

The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab192643, 1/500 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was rabbit monoclonal IgG [EPR25A] Alexa Fluor® 488 ([ab199091](#)) used at the same concentration and conditions as the primary antibody. Unlabeled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



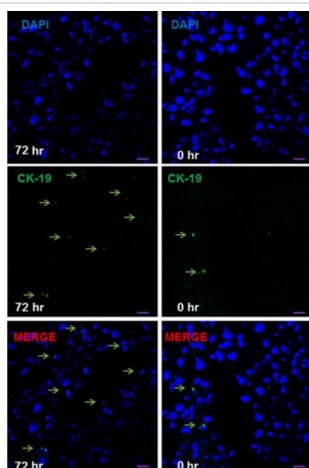
Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Cytokeratin 19 antibody [EP1580Y] (ab192643)

Immunofluorescence staining of Cytokeratin 19 in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells using ab192643. The cells were fixed with 4% formaldehyde (10 min) and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Triton X-100 for 1hr. The cells were then incubated with ab192643 at a working dilution of 1 in 100 (shown in green) and **ab7291** (Mouse monoclonal [DM1A] to alpha Tubulin) at 1 µg/ml overnight at +4°C, followed by a further incubation at room temperature for 1hr with an AlexaFluor® 594 Goat anti-mouse IgG (H&L - preadsorbed) secondary (**ab150120**) at 2 µg/ml (shown in pseudo-color red).

Nuclear DNA was labeled in blue with DAPI.

This product gave a positive signal in 100% methanol (5 min) fixed HeLa cells under the same testing conditions.

Image was taken with a Confocal microscope (Leica-microsystems, TCS SP8)



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Cytokeratin 19 antibody [EP1580Y] (ab192643)

Image from Wang et al, J Cell Mol Med 2014 Sep;18(9):1720-6. Fig 5, doi:10.1111/jcmm.12355.

This data was produced using unconjugated parent **ab52625**.

Immunocytochemistry analysis of mouse hepatic stem cells cells labelling CK-19 with **ab52625** at 1/50 dilution.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Alexa Fluor® 488 Anti-Cytokeratin 19 antibody  
[EP1580Y] (ab192643)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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