abcam

Product datasheet

Alexa Fluor® 647 Anti-Cytokeratin 19 antibody [EP1580Y] ab192980







Overview

Product name Alexa Fluor® 647 Anti-Cytokeratin 19 antibody [EP1580Y]

Description Alexa Fluor® 647 Rabbit monoclonal [EP1580Y] to Cytokeratin 19

Host species Rabbit

Conjugation Alexa Fluor® 647. Ex: 652nm, Em: 668nm

Tested applications Suitable for: ICC/IF, Flow Cyt (Intra)

Reacts with: Human **Species reactivity**

Predicted to work with: Mouse

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control ICC/IF - HeLa, Flow Cyt (intra) - HeLa ICC/IF KO: MCF7 cells (MCF7-KRT19 KO used as a

negative cell line).

General notes Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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Properties

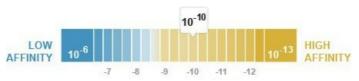
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Form Liquid

Storage instructions 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.

Dissociation constant (K_D) $K_D = 3.70 \times 10^{-10} M$



Learn more about K_D

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Protein A purified

Clonality Monoclonal
Clone number EP1580Y

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab192980 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
ICC/IF		1/50. Signal can be observed in cells fixed with either methanol or paraformaldehyde.
Flow Cyt (Intra)		Use 0.2µl for 10 ⁶ cells. ab199093 - Rabbit monoclonal lgG (Alexa Fluor® 647), is suitable for use as an isotype control with this antibody.

Function Involved in the organization of myofibers. Together with KRT8, helps to link the contractile

apparatus to dystrophin at the costameres of striated muscle.

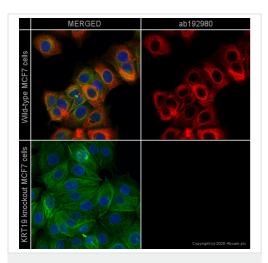
Tissue specificity Expressed in a defined zone of basal keratinocytes in the deep outer root sheath of hair follicles.

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.

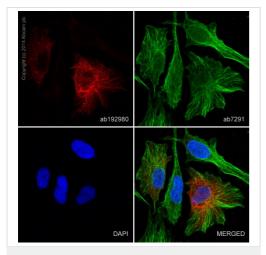
Sequence similarities Belongs to the intermediate filament family.

Images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Cytokeratin 19 antibody [EP1580Y] (ab192980)

ab192980 staining Cytokeratin 19 in wild-type MCF7 cells (top panel) and KRT19 knockout MCF7 cells (bottom panel). The cells were fixed with 4% paraformaldehyde (10 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 ab192980 at 1/100 dilution (shown in red) and ab195887 (Mouse monoclonal to alpha Tubulin - Alexa Fluor® 488) at 1/250 dilution (shown in green) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

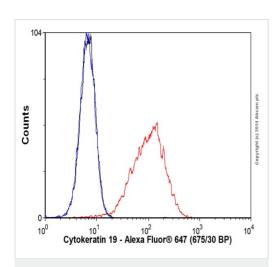


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Cytokeratin 19 antibody [EP1580Y] (ab192980)

ab192980 staining Cytokeratin 19 in HeLa cells. The cells were fixed with 100% methanol (5 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 ab192980 at a working dilution of 1 in 50 (shown in red) and ab7291 (Mouse monoclonal [DM1A] to alpha Tubulin) at 1µg/ml overnight at +4°C, followed by a further incubation at room temperature for 1hr with an AlexaFluor® 488 Goat anti-mouse lgG (H&L - preadsorbed) secondary (ab150117) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

This product gave a positive signal in 4% formaldehyde (10 min) fixed HeLa cells under the same testing conditions

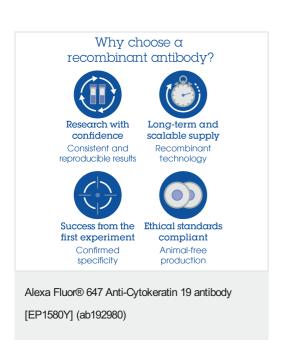
Image was taken with a Confocal microscope (Leica microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-Cytokeratin 19 antibody [EP1580Y] (ab192980) Overlay histogram showing HeLa cells stained with ab192980 (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 (ab192980, 0.2 μ l/1x10⁶ cells) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (Alexa Fluor[®] 647) (0.1 μ g/1x10⁶ cells) for 30 min at 22°C. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 25mW red solid state diode laser (635nm) and 675/30 bandpass filter.

This antibody gave a positive signal in HeLa fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



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