# abcam

## Product datasheet

# Alexa Fluor® 488 Anti-Cytokeratin 7 antibody [EPR1619Y] - Cytoskeleton Marker ab185048

Recombinant RabMAb

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#### Overview

Product name Alexa Fluor® 488 Anti-Cytokeratin 7 antibody [EPR1619Y] - Cytoskeleton Marker

**Description** Alexa Fluor® 488 Rabbit monoclonal [EPR1619Y] to Cytokeratin 7 - Cytoskeleton Marker

Host species Rabbit

**Conjugation** Alexa Fluor® 488. Ex: 495nm, Em: 519nm

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

Species reactivity Reacts with: Human

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

Positive control ICC/IF: HeLa and T47D cells. Flow Cyt (intra): T47D cells.

**General notes**This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

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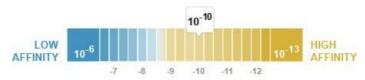
#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.

**Dissociation constant (K<sub>D</sub>)**  $K_D = 2.10 \times 10^{-10} M$ 



Learn more about K<sub>D</sub>

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

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

Purity Protein A purified

Clonality Monoclonal
Clone number EPR1619Y

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab185048 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.  ab199091 - Rabbit monoclonal lgG (Alexa Fluor® 488), is suitable for use as an isotype control with this antibody.
ICC/IF	*** <u>*</u> (1)	1/50 - 1/100.

# **Target**

**Function** Blocks interferon-dependent interphase and stimulates DNA synthesis in cells. Involved in the

translational regulation of the human papillomavirus type 16 E7 mRNA (HPV16 E7).

Tissue specificity Expressed in cultured epidermal, bronchial and mesothelial cells but absent in colon, ectocervix

and liver. Observed throughout the glandular cells in the junction between stomach and esophagus

but is absent in the esophagus.

**Sequence similarities**Belongs to the intermediate filament family.

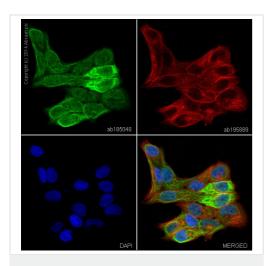
Post-translational

modifications

Arg-20 is dimethylated, probably to asymmetric dimethylarginine.

Cellular localization Cytoplasm.

#### **Images**

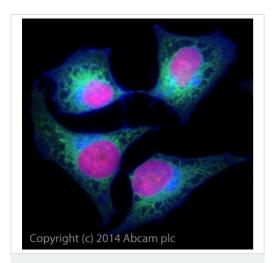


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Cytokeratin 7 antibody [EPR1619Y] - Cytoskeleton Marker (ab185048)

ab185048 staining Cytokeratin 7 in T47D cells. The cells were fixed with 4% formaldehyde (10 min), permeabilised in 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with ab185048 at 1/100 dilution (shown in green) and ab195889, Mouse monoclonal [DM1A] to alpha Tubulin (Alexa Fluor<sup>®</sup> 594, shown in red) at 2µg/ml overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

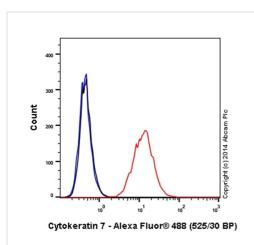
This product gave a positive signal in 100% methanol (5 min) fixed A549 cells under the same testing conditions.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Cytokeratin 7 antibody [EPR1619Y] - Cytoskeleton Marker (ab185048)

ab185048 staining Cytokeratin 7 in HeLa cells. The cells were fixed with 4% PFA (10min) and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with ab185048 at 1/50 dilution overnight at +4°C (shown in green). AlexaFluor  $^{\tiny (B)}$ 350 WGA was used at a 1/200 dilution and incubated for 1h with the cells, to label plasma membranes (shown in blue). Nuclear DNA was labelled in red with 1.25  $\mu$ M DRAQ5  $^{\tiny TM}$  (ab108410).

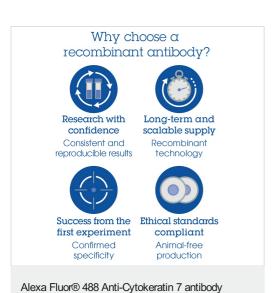


Flow Cytometry (Intracellular) - Alexa Fluor® 488
Anti-Cytokeratin 7 antibody [EPR1619Y] Cytoskeleton Marker (ab185048)

Overlay histogram showing T47D cells stained with ab185048 (red line). The cells were fixed with 4% formaldehyde (10 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 (ab185048, 1/500 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor® 488 used at the same concentration and conditions as the primary antibody. Unlabelled 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.

This antibody gave a positive signal in T47D cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



[EPR1619Y] - Cytoskeleton Marker (ab185048)

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

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