# abcam

# **Product datasheet**

# Alexa Fluor® 647 Anti-RPA70 antibody [EPR3472] ab199240

重组 RabMAb

## <u>4 References</u> 3 图像

概述		
产品名称	Alexa Fluor® 647荧 <b>光</b> Anti-RPA70 <b>抗体</b> [EPR3472]	
描述	Alexa Fluor® 647荧光兔单克隆抗体[EPR3472] to RPA70	
宿主	Rabbit	
<b>偶</b> 联物	Alexa Fluor® 647. Ex: 652nm, Em: 668nm	
经测试应 <b>用</b>	适用于: ICC/IF, Flow Cyt (Intra)	
<b>种属反</b> 应性	与反应: Human	
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
<b>阳性</b> 对照	Flow Cyt (intra): Hela cells ICC/IF: HeLa cells	
常规说明	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> <li>Alexa Fluor<sup>®</sup> is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor<sup>®</sup> dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor<sup>®</sup> 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<sup>®</sup> 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 <b>outlicensing@thermofisher.com</b>.</li> </ul>	

性能	
形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. Store In the Dark.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
纯 <b>度</b>	Protein A purified
克隆	单 <b>克隆</b>
克 <b>隆</b> 编号	EPR3472
同种型	lgG

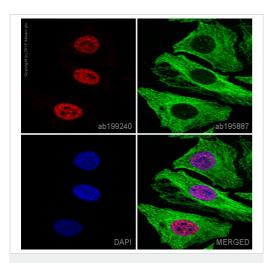
应用

### The Abpromise guarantee Abpromise™承诺保证使用ab199240于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		1/100. This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).
Flow Cyt (Intra)		1/50. <u>ab199093</u> - Rabbit monoclonal IgG (Alexa Fluor® 647), is suitable for use as an isotype control with this antibody.

<b>靶</b> 标	
功能	Plays an essential role in several cellular processes in DNA metabolism including replication, recombination and DNA repair. Binds and subsequently stabilizes single-stranded DNA intermediates and thus prevents complementary DNA from reannealing. Functions as component of the alternative replication protein A complex (aRPA). aRPA binds single-stranded DNA and probably plays a role in DNA repair; it does not support chromosomal DNA replication and cell cycle progression through S-phase. In vitro, aRPA cannot promote efficient priming by DNA polymerase alpha but supports DNA polymerase delta synthesis in the presence of PCNA and replication factor C (RFC), the dual incision/excision reaction of nucleotide excision repair and RAD51-dependent strand exchange.
序列相似性	Belongs to the replication factor A protein 1 family.
翻译后 <b>修</b> 饰	Phosphorylated upon DNA damage, probably by ATM or ATR. Sumoylated on lysine residues Lys-449 and Lys-577, with Lys-449 being the major site. Sumoylation promotes recruitment of RAD51 to the DNA damage foci to initiate DNA repair through homologous recombinaison. Desumoylated by SENP6.
细 <b>胞定位</b>	Nucleus.

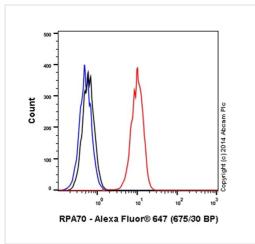


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-RPA70 antibody [EPR3472] (ab199240)

ab199240 staining RPA70 in HeLa cells. 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 overnight at +4°C with ab199240 at a 1/100 dilution (shown in red) and **ab195887**, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

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

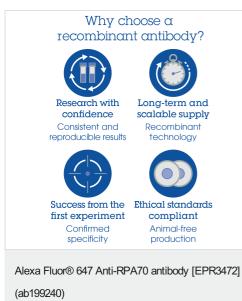
This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 4% formaldehyde (10 min).



Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-RPA70 antibody [EPR3472] (ab199240) Overlay histogram showing HeLa cells stained with ab199240 (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 (ab199240, 1/50 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor<sup>®</sup> 647 (<u>ab199093</u>) 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 solid-state 25mW red diode laser (635 nm) and 675/30 bandpass filter.

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



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