

# **Product datasheet**

# Alexa Fluor® 488 Anti-PI 3 Kinase p85 alpha antibody [EPR18702] ab225371

Recombinant RabMAb

3 Images

Overview		
Product name	Alexa Fluor® 488 Anti-PI 3 Kinase p85 alpha antibody [EPR18702]	
Description	Alexa Fluor® 488 Rabbit monoclonal [EPR18702] to PI 3 Kinase p85 alpha	
Host species	Rabbit	
Conjugation	Alexa Fluor® 488. Ex: 495nm, Em: 519nm	
Tested applications	Suitable for: ICC/IF, Flow Cyt (Intra)	
Species reactivity	Reacts with: Human	
	Predicted to work with: Mouse, Rat	
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
Positive control	ICC/IF: Jurkat cells. Flow Cyt (intra): Jurkat cells	
General notes	<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 see here.</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> </ul>	
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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. Avoid freeze / thaw cycle. Store In the Dark.
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	EPR18702
lsotype	lgG

## Applications

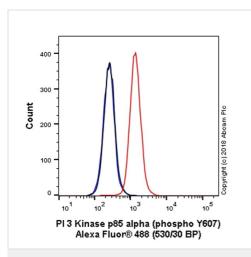
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab225371 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/1000. This product gave a positive signal in Jurkat cells fixed with 80% methanol (5 min)
Flow Cyt (Intra)		1/500.

Target	
Function	Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues.
Tissue specificity	lsoform 2 is expressed in skeletal muscle and brain, and at lower levels in kidney and cardiac muscle. Isoform 2 and isoform 4 are present in skeletal muscle (at protein level).
Sequence similarities	Belongs to the PI3K p85 subunit family. Contains 1 Rho-GAP domain. Contains 2 SH2 domains. Contains 1 SH3 domain.
Domain	The SH3 domain mediates the binding to CBLB, and to HIV-1 Nef.
Post-translational modifications	Polyubiquitinated in T-cells by CBLB; which does not promote proteasomal degradation but impairs association with CD28 and CD3Z upon T-cell activation. Phosphorylated. Dephosphorylated by PTPRJ.

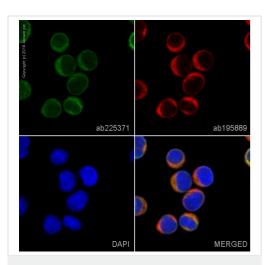
#### Images



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Pl 3 Kinase p85 alpha antibody [EPR18702] (ab225371) Overlay histogram showing Jurkat cells stained with ab225371 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab225371, 1/500 dilution) for 30 min at 22°C

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor<sup>®</sup> 488 (<u>ab199091</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 50 mW Blue laser (488nm) and 530/30 bandpass filter.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-PI 3 Kinase p85 alpha antibody [EPR18702] (ab225371) ab225371 staining PI3 Kinase p85 alpha (phospho Y607) in Jurkat cells. The cells were fixed with 80% 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 ab225371 at 1/1000 dilution (shown in green) and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

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



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