

## Product datasheet

# Anti-PIN4 antibody [EPR10033] (Alexa Fluor® 647) ab225213

Recombinant RabMAb

1 Image

### Overview

<b>Product name</b>	Anti-PIN4 antibody [EPR10033] (Alexa Fluor® 647)
<b>Description</b>	Rabbit monoclonal [EPR10033] to PIN4 (Alexa Fluor® 647)
<b>Host species</b>	Rabbit
<b>Conjugation</b>	Alexa Fluor® 647. Ex: 652nm, Em: 668nm
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide within Human PIN4. The exact sequence is proprietary. Database link: <a href="#">Q9Y237</a>
<b>Positive control</b>	ICC/IF: HeLa cells
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <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> </ul> For more information <a href="#">see here</a> .

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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<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 long term. Avoid freeze / thaw cycle. Store In the Dark.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR10033
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab225213** 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		1/100. This product gave a positive signal in HeLa cells fixed with 100% methanol (5 min)

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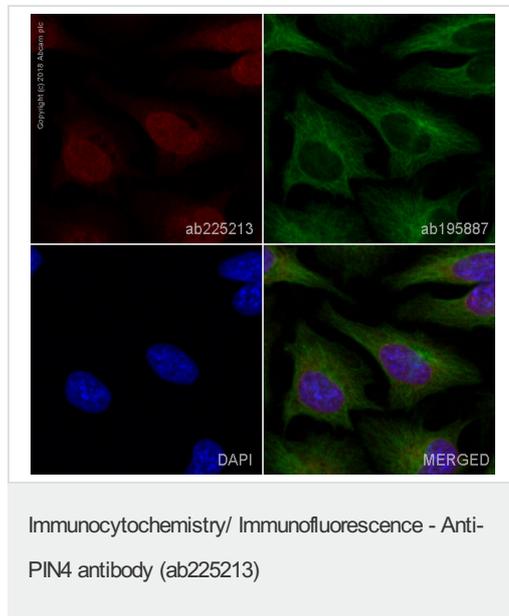
## Target

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<b>Function</b>	Isoform 1 is involved as a ribosomal RNA processing factor in ribosome biogenesis. Binds to tightly bent AT-rich stretches of double-stranded DNA. Isoform 2 binds to double-stranded DNA.
<b>Tissue specificity</b>	Isoform 2 is much more stable than isoform 1 (at protein level). Ubiquitous. Isoform 1 and isoform 2 are expressed in kidney, liver, blood vessel, brain, mammary gland, skeletal muscle, small intestine and submandibularis. Isoform 1 transcripts are much more abundant than isoform 2 in each tissue analyzed.
<b>Sequence similarities</b>	Belongs to the ppiC/parvulin rotamase family. PIN4 subfamily. Contains 1 PpiC domain.
<b>Domain</b>	The PPlase domain enhances mitochondrial targeting.
<b>Post-translational modifications</b>	Phosphorylated. Isoform 1 phosphorylation occurs both in the nucleus and the cytoplasm. Isoform 1 phosphorylation at Ser-19 does not affect its PPlase activity but is required for nuclear localization, and the dephosphorylation is a prerequisite for the binding to DNA. The unphosphorylated isoform 1 associates with the pre-rRNP complexes in the nucleus. Isoform 2 is sumoylated by SUMO2 and SUMO3.
<b>Cellular localization</b>	Mitochondrion. Mitochondrion matrix. Imported in a time- and membrane potential-dependent

manner to the mitochondrial matrix, but without concomitant processing of the protein. Directed to mitochondria by a novel N-terminal domain that functions as non-cleavable mitochondrial targeting peptide and Nucleus > nucleolus. Cytoplasm > cytoskeleton > spindle. Cytoplasm. Colocalizes in the nucleolus during interphase and on the spindle apparatus during mitosis with NPM1.

## Images



ab225213 staining PIN4 in HeLa (human epithelial cell line from cervix adenocarcinoma) 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 ab225213 at 1/100 dilution (shown in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 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).

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

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