

## Product datasheet

# Anti-PIN4 antibody [EPR10033] - BSA and Azide free ab238927

Recombinant RabMAb

[4 Images](#)

### Overview

<b>Product name</b>	Anti-PIN4 antibody [EPR10033] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR10033] to PIN4 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF <b>Unsuitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human breast tissue. ICC/IF: HepG2 cells
<b>General notes</b>	<p>ab238927 is the carrier-free version of <a href="#">ab155283</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit</p>

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR10033
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab238927 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
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 13 kDa.
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
<b>ICC/IF</b>		Use at an assay dependent concentration.

**Application notes** Is unsuitable for Flow Cyt.

## Target

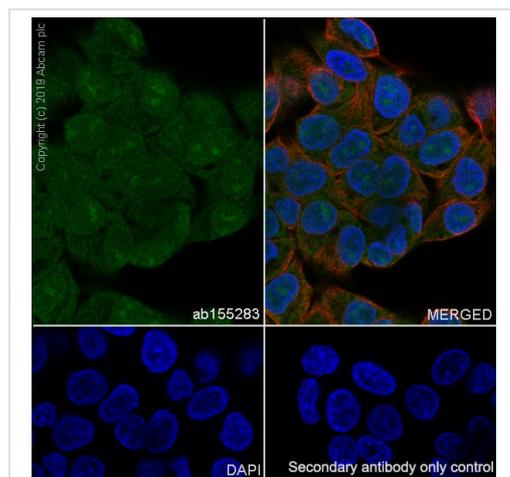
<b>Function</b>	Isoform 1 is involved as a ribosomal RNA processing factor in ribosome biogenesis. Binds to tightly bent AT-rich stretches of double-stranded DNA. Isoform 2 binds to double-stranded DNA.
<b>Tissue specificity</b>	Isoform 2 is much more stable than isoform 1 (at protein level). Ubiquitous. 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.

## Cellular localization

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.

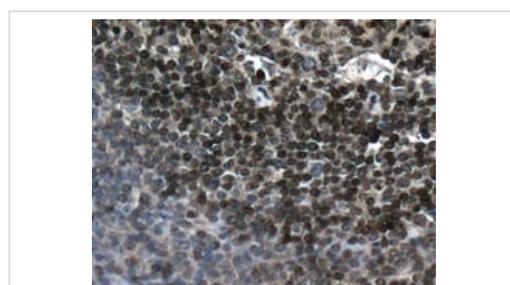
## Images



Immunocytochemistry/ Immunofluorescence - Anti-PIN4 antibody [EPR10033] - BSA and Azide free (ab238927)

Immunocytochemistry/ Immunofluorescence analysis of HepG2 (human hepatocellular carcinoma epithelial cell) cells labeling PIN4 with purified **ab155283** at 1/150 dilution (10 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL) was used as the secondary antibody only control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab155283**).

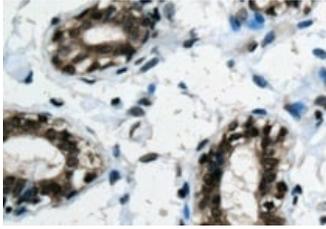


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PIN4 antibody [EPR10033] - BSA and Azide free (ab238927)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue, labeling PIN4 with **ab155283** at 1/250 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab155283**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PIN4 antibody [EPR10033] - BSA and Azide free (ab238927)

Immunohistochemical analysis of paraffin embedded Human breast tissue, labeling PIN4 with **ab155283** at a 1/250 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab155283**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

### Why choose a recombinant antibody?



Anti-PIN4 antibody [EPR10033] - BSA and Azide free (ab238927)

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