abcam

Product datasheet

PE Anti-Dnmt1 antibody [EPR18453] ab305683

Recombinant

RabMAb

1 Image

Overview

Product name PE Anti-Dnmt1 antibody [EPR18453]

Description PE Rabbit monoclonal [EPR18453] to Dnmt1

Host species Rabbit

Conjugation PE. Ex: 488nm, Em: 575nm

Tested applications Suitable for: Target binding affinity, Antibody labelling

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

General notes

This $\underline{\textbf{conjugated primary antibody}}$ is released using a quantitative quality control method that

evaluates binding affinity post-conjugation and efficiency of antibody labeling.

For suitable applications and species reactivity, please refer to the unconjugated version of this

clone. This conjugated antibody is eligible for Abtrial: learn more $\underline{\textbf{here}}.$

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[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

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

In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide Constituents: 98% PBS, 1% BSA

Purity Protein A purified

Clonality Monoclonal

1

Clone number EPR18453

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab305683 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
Target binding affinity		Use at an assay dependent concentration.
Antibody labelling		Use at an assay dependent concentration.

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Function

Methylates CpG residues. Preferentially methylates hemimethylated DNA. Associates with DNA replication sites in S phase maintaining the methylation pattern in the newly synthesized strand, that is essential for epigenetic inheritance. Associates with chromatin during G2 and M phases to maintain DNA methylation independently of replication. It is responsible for maintaining methylation patterns established in development. DNA methylation is coordinated with methylation

of histones. Mediates transcriptional repression by direct binding to HDAC2. In association with DNMT3B and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9.

Tissue specificity

Ubiquitous; highly expressed in fetal tissues, heart, kidney, placenta, peripheral blood mononuclear cells, and expressed at lower levels in spleen, lung, brain, small intestine, colon,

liver, and skeletal muscle. Isoform 2 is less expressed than isoform 1.

Sequence similarities

Belongs to the C5-methyltransferase family.

Contains 2 BAH domains.

Contains 1 CXXC-type zinc finger.

Domain

The N-terminal part is required for homodimerization and acts as a regulatory domain.

Post-translational

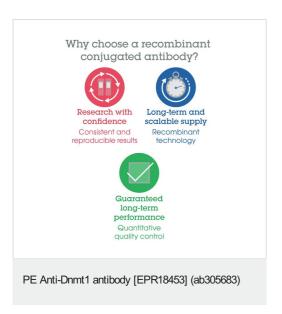
modifications

 $Sum oy lated; sum oy lation increases \ activity. \\$

Cellular localization

Nucleus.

Images



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