abcam

Product datasheet

Anti-Histone H3.3C antibody [EPR10085(B)] ab150417

ועלצעבע RabMAb

1 References 画像数 14

製品の概要

製品名 Anti-Histone H3.3C antibody [EPR10085(B)]

製品の詳細 Rabbit monoclonal [EPR10085(B)] to Histone H3.3C

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

適用なし: Flow Cyt or ICC/IF

種交差性 交差種: Mouse, Rat, Human

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

ポジティブ・コントロール Human fetal brain, testis and SH-SY5Y lysates; Human kidney and tonsil tissues.

特記事項 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**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR10085(B)

アイソタイプ ΙgG

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab150417の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000 - 1/10000. Predicted molecular weight: 15 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

追加情報

Is unsuitable for Flow Cyt or ICC/IF.

ターゲット情報

機能

組織特異性 配列類似性 翻訳後修飾 Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. Hominid-specific H3.5/H3F3C preferentially colocalizes with euchromatin, and it is associated with actively transcribed genes.

Specifically expressed in the seminiferous tubules of testis.

Belongs to the histone H3 family.

Acetylation is generally linked to gene activation. Acetylation on Lys-10 (H3K9ac) impairs methylation at Arg-9 (H3R8me2s). Acetylation on Lys-19 (H3K18ac) and Lys-24 (H3K24ac) favors methylation at Arg-18 (H3R17me).

Citrullination at Arg-9 (H3R8ci) and/or Arg-18 (H3R17ci) by PAD4 impairs methylation and represses transcription.

Asymmetric dimethylation at Arg-18 (H3R17me2a) by CARM1 is linked to gene activation. Symmetric dimethylation at Arg-9 (H3R8me2s) by PRMT5 is linked to gene repression. Asymmetric dimethylation at Arg-3 (H3R2me2a) by PRMT6 is linked to gene repression and is mutually exclusive with H3 Lys-5 methylation (H3K4me2 and H3K4me3). H3R2me2a is present at the 3' of genes regardless of their transcription state and is enriched on inactive promoters, while it is absent on active promoters.

Methylation at Lys-5 (H3K4me) is linked to gene activation. Methylation at Lys-5 (H3K4me) facilitates subsequent acetylation of H3 and H4. Methylation at Lys-10 (H3K9me) and Lys-28 (H3K27me) are linked to gene repression. Methylation at Lys-10 (H3K9me) is a specific target for HP1 proteins (CBX1, CBX3 and CBX5) and prevents subsequent phosphorylation at Ser-11 (H3S10ph) and acetylation of H3 and H4. Methylation at Lys-5 (H3K4me) requires preliminary monoubiquitination of H2B at 'Lys-120'. Methylation at Lys-10 (H3K9me) and Lys-28 (H3K27me) are enriched in inactive X chromosome chromatin. Monomethylation at Lys-56 (H3K56me1) by EHMT2/G9A in G1 phase promotes interaction with PCNA and is required for DNA replication. Phosphorylated at Thr-4 (H3T3ph) by GSG2/haspin during prophase and dephosphorylated during anaphase. Phosphorylation at Ser-11 (H3S10ph) by AURKB is crucial for chromosome condensation and cell-cycle progression during mitosis and meiosis. In addition phosphorylation at Ser-11 (H3S10ph) by RPS6KA4 and RPS6KA5 is important during interphase because it enables the transcription of genes following external stimulation, like mitogens, stress, growth factors or UV irradiation and result in the activation of genes, such as c-fos and c-jun. Phosphorylation at Ser-11 (H3S10ph), which is linked to gene activation, prevents methylation at

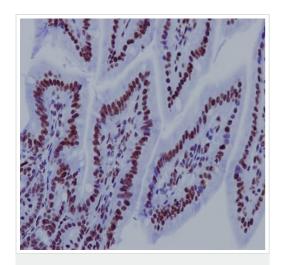
Lys-10 (H3K9me) but facilitates acetylation of H3 and H4. Phosphorylation at Ser-11 (H3S10ph) by AURKB mediates the dissociation of HP1 proteins (CBX1, CBX3 and CBX5) from heterochromatin. Phosphorylation at Ser-11 (H3S10ph) is also an essential regulatory mechanism for neoplastic cell transformation. Phosphorylated at Ser-29 (H3S28ph) by MLTK isoform 1, RPS6KA5 or AURKB during mitosis or upon ultraviolet B irradiation. Phosphorylation at Thr-7 (H3T6ph) by PRKCB is a specific tag for epigenetic transcriptional activation that prevents demethylation of Lys-5 (H3K4me) by LSD1/KDM1A. At centromeres, specifically phosphorylated at Thr-12 (H3T11ph) from prophase to early anaphase, by DAPK3 and PKN1. Phosphorylation at Thr-12 (H3T11ph) by PKN1 is a specific tag for epigenetic transcriptional activation that promotes demethylation of Lys-10 (H3K9me) by KDM4C/JMJD2C. Phosphorylation at Tyr-41 (H3Y41ph) by JAK2 promotes exclusion of CBX5 (HP1 alpha) from chromatin.

Lysine deamination at Lys-5 (H3K4all) to form allysine is mediated by LOXL2. Allysine formation by LOXL2 only takes place on H3K4me3 and results in gene repression.

Nucleus. Chromosome.

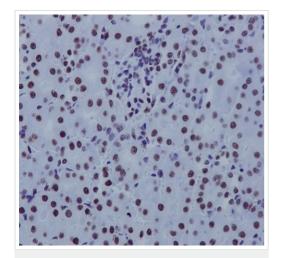
細胞内局在

画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

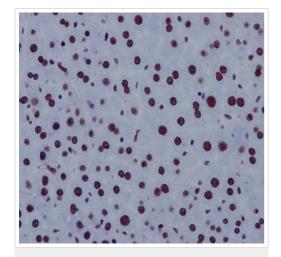
Nuclear staining of Mouse collon using ab150417 at 1/500.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

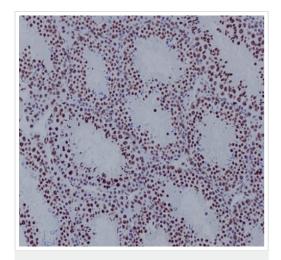
Nuclear staining of Mouse kidney using ab150417 at 1/500.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

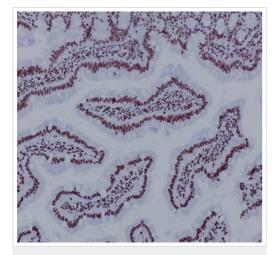
Nuclear astaining of Mouse liver using ab150417 at 1/500.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

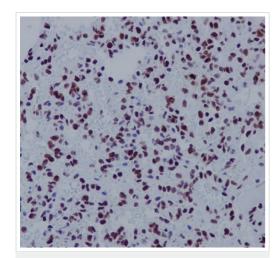
Nuclear staining of Mouse testis using ab150417 at 1/500.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

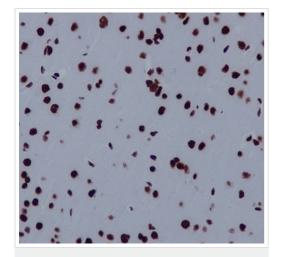
Nuclear staining of Rat colon usign ab150417 at 1/500.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

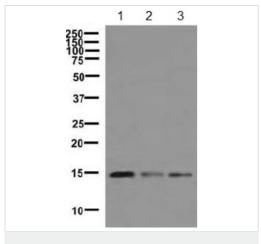
Nuclear staining of Rat Lung tissue using ab150417 at 1/500.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

Nuclear staining of Rat Brain using ab150417 at 1/500.



Western blot - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

All lanes : Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417) at 1/1000 dilution

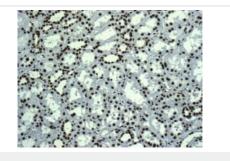
Lane 1: Human fetal brain lysate

Lane 2: Human testis lysate

Lane 3: SH-SY5Y lysate

Lysates/proteins at 10 µg per lane.

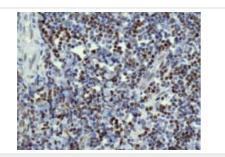
Predicted band size: 15 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

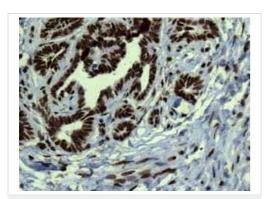
Immunohistochemical analysis of paraffin embedded Human kidney tissue labeling Histone H3.3C with ab150417 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

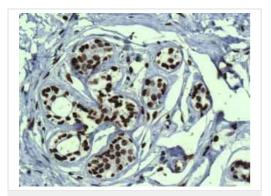
Immunohistochemical analysis of paraffin embedded Human tonsil tissue labeling Histone H3.3C with ab150417 at 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

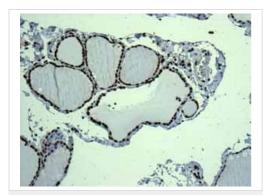
Immunohistochemical analysis of paraffin embedded normal Human ovary tissue using ab150417 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

Immunohistochemical analysis of paraffin embedded normal Human breast tissue using ab150417 showing +ve staining.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H3.3C antibody [EPR10085(B)] (ab150417)

Immunohistochemical analysis of paraffin embedded Human Thyroid gland tissue using ab150417 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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