abcam

Product datasheet

Anti-HNF-4-alpha antibody [EPR16885-99] ab201460

ועלשעבע RabMAb

★★★★★ 1 Abreviews 14 References 画像数 13

製品の概要

製品名 Anti-HNF-4-alpha antibody [EPR16885-99]

製品の詳細 Rabbit monoclonal [EPR16885-99] to HNF-4-alpha

由来種 Rabbit

特異性 Mouse species are recommended based on IHC result. This antibody is unsuitable to be used in

WB on mouse.

アプリケーション 適用あり: Flow Cyt (Intra), WB, IHC-P, ICC/IF, ChIC/CUT&RUN-seq

種交差性 交差種: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HepG2 and Caco-2 whole cell lysates; Human colon and fetal kidney lysates. IHC-P: Human

colon, Human liver, mouse liver and rat colon tissues. ICC/IF: HepG2 and HT-29 cells.

ChIC/CUT&RUN-Seq: HepG2 cells.

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

ポリモノ

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

モノクローナル

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

クローン名 EPR16885-99

アイソタイプ lgG

アプリケーション

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ab201460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
Flow Cyt (Intra)		1/1000. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000. Detects a band of approximately 53 kDa (predicted molecular weight: 53 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/2000.
ChlC/CUT&RUN-seq		Use at an assay dependent concentration. 5 µg

ターゲット情報

機能 Transcriptionally controlled transcription factor. Binds to DNA sites required for the transcription of

alpha 1-antitrypsin, apolipoprotein CIII, transthyretin genes and HNF1-alpha. May be essential for

development of the liver, kidney and intestine.

関連疾患 Defects in HNF4A are the cause of maturity-onset diabetes of the young type 1 (MODY1)

[MIM:125850]; also symbolized MODY-1. MODY is a form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the

beginning of the disease.

配列類似性 Belongs to the nuclear hormone receptor family. NR2 subfamily.

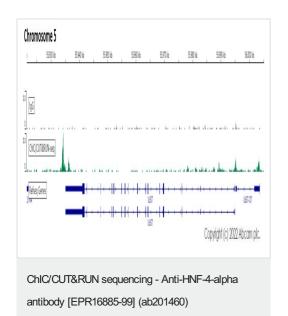
Contains 1 nuclear receptor DNA-binding domain.

翻訳後修飾 Phosphorylated on tyrosine residue(s); phosphorylation is important for its DNA-binding activity.

Phosphorylation may directly or indirectly play a regulatory role in the subnuclear distribution.

細胞内局在 Nucleus.

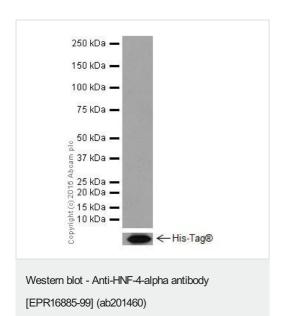
画像



ChIC/CUT&RUN was performed using a pAG-MNAse at a final concentration of 700 ng/mL, 2.5 x 10^5 HepG2 (Human liver hepatocellular carcinoma cell line) cells and 5 μ g of ab201460 [EPR16885-99)]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative lgG control ab172730 is also shown.

Additional screenshots of mapped reads can be downloaded $\underline{\textbf{here}}.$

The University of Geneva owns patents relevant to ChlC (Chromatin Immuno-Cleavage) methods.



Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460) at 1/1000 dilution + Full length mouse HNF-4-gamma recombinant protein at $10 \mu g$

Secondary

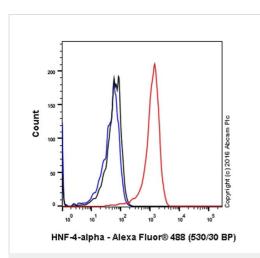
Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 53 kDa

Exposure time: 3 minutes

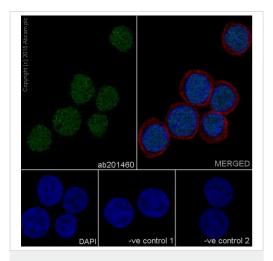
Blocking/Dilution buffer: 5% NFDM/TBST.

Based on sequence analysis of the immunogen, ab201460 shares 72% homology with HNF4 gamma. The levels of XR were tested in the accompanying recombinant protein, WB experiment.



Flow Cytometry (Intracellular) - Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460)

Intracellular Flow Cytometry analysis of HepG2 (human hepatocellular carcinoma) labelling CDKN2A/p16lNK4a with purified ab201460 at 1/1000 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Alexa Fluor[®] 488 goat anti-rabbit lgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal lgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Immunocytochemistry/ Immunofluorescence - Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460)

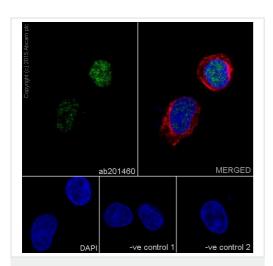
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton-X100 permeabilized HT-29 (Human colorectal adenocarcinoma cells) cells labeling HNF-4-alpha with ab201460 at 1/2000 dilution, followed by AlexaFluor®488 Goat anti-Rabbit secondary antibody (ab150077) at 1/500 dilution (green).

Confocal image showing nuclear staining on HT-29 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is stained with ab7291 anti-Tubulin (mouse mAb) at 1/1000 dilution, followed by AlexaFluor®594 Goat anti-Mouse secondary antibody (ab150120) at 1/500 dilution (red).

-ve control 1: ab201460 at 1/2000 dilution followed by AlexaFluor®594 Goat anti-Mouse secondary antibody (ab150120) at 1/500 dilution.

-ve control 2: <u>ab7291</u> anti-Tubulin (mouse mAb) at 1/1000 dilution, followed by AlexaFluor®488 Goat anti-Rabbit secondary antibody (<u>ab150077</u>) at 1/500 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460)

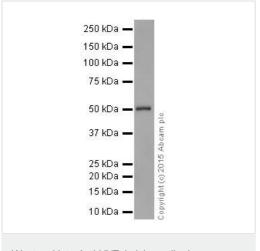
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton-X100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling HNF-4-alpha with ab201460 at 1/2000 dilution, followed by AlexaFluor®488 Goat anti-Rabbit secondary antibody (ab150077) at 1/500 dilution (green).

Confocal image showing nuclear staining on HT-29 cell line.

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-ve control 1: ab201460 at 1/2000 dilution followed by AlexaFluor®594 Goat anti-Mouse secondary antibody (ab150120) at 1/500 dilution.

-ve control 2: <u>ab7291</u> anti-Tubulin (mouse mAb) at 1/1000 dilution, followed by AlexaFluor®488 Goat anti-Rabbit secondary antibody (<u>ab150077</u>) at 1/500 dilution.



Western blot - Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460)

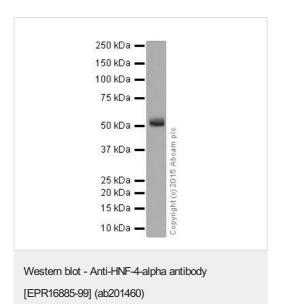
Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460) at 1/10000 dilution + HepG2 (Human liver hepatocellular carcinoma) whole cell lysate at 10 µg

Secondary

Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 53 kDa
Observed band size: 53 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



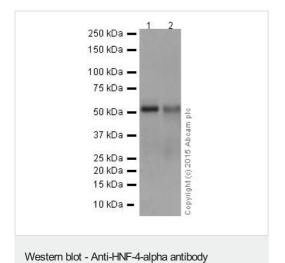
Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460) at 1/1000 dilution + Caco-2 (Human colorectal adenocarcinoma cells) whole cell lysate at 10 μg

Secondary

Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 53 kDa **Observed band size:** 53 kDa

Exposure time: 15 seconds



[EPR16885-99] (ab201460)

Lane 1 : Human colon lysate

at 1/1000 dilution

Lane 2: Human fetal kidney lysate

Blocking/Dilution buffer: 5% NFDM/TBST.

Lysates/proteins at 10 µg per lane.

Secondary

 $\textbf{All lanes:} \ \, \textbf{Anti-Rabbit lgG (HRP), specific to the non-reduced form}$

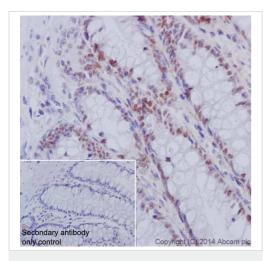
All lanes: Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460)

of IgG at 1/1000 dilution

Predicted band size: 53 kDa **Observed band size:** 53 kDa

Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.



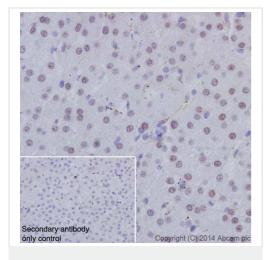
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF-4-alpha antibody
[EPR16885-99] (ab201460)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling HNF-4-alpha with ab201460 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution.

Nuclear staining on Human colon tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



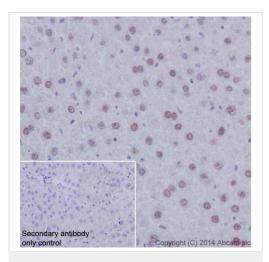
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF-4-alpha antibody
[EPR16885-99] (ab201460)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling HNF-4-alpha with ab201460 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution.

Nuclear staining on Human liver tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



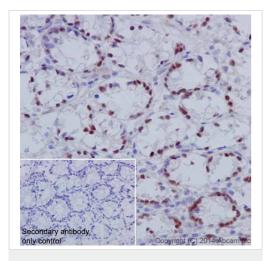
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF-4-alpha antibody
[EPR16885-99] (ab201460)

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling HNF-4-alpha with ab201460 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution.

Nuclear staining on mouse liver tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF-4-alpha antibody [EPR16885-99] (ab201460)

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling HNF-4-alpha with ab201460 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution.

Nuclear staining on rat colon tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



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