abcam

Product datasheet

Anti-HNF-4-alpha antibody [EPR3648] - BSA and Azide free ab227997

יובעדער RabMAb

画像数9

製品の概要

製品名 Anti-HNF-4-alpha antibody [EPR3648] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR3648] to HNF-4-alpha - BSA and Azide free

由来種 Rabbit

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

適用なし: IP

種交差性 交差種: 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 WB: HepG2, A549 and SW480 cell lysates. IHC-P: Human colon and kidney tissues. ICC/IF:

HepG2 cells. Flow Cyt (intra): HepG2 cells. ChIP-seq: HepG2 cells. ChIC/CUT&RUN-Seq: HepG2

特記事項 ab227997 is the carrier-free version of ab92378.

> Our carrier-free 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.20

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル **ウローン名** EPR3648

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ab227997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)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal lgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.
ChIP-sequencing		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 53 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
ICC/IF		Use at an assay dependent concentration.
ChIC/CUT&RUN-seq		Use at an assay dependent concentration.

追加情報 Is unsuitable for IP.

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.

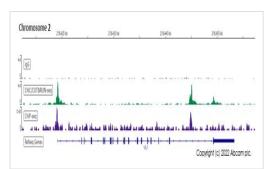
翻訳後修飾

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.

Nucleus.

細胞内局在

画像



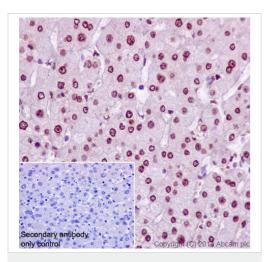
ChIC/CUT&RUN sequencing - Anti-HNF-4-alpha antibody [EPR3648] - BSA and Azide free (ab227997) ChIC/CUT&RUN was performed using a pAG-MNAse at a final concentration of 700 ng/mL, 2.5×10^5 HepG2 (Human liver hepatocellular carcinoma cell line) cells and 5 µg of <u>ab92378</u> [EPR3648]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control <u>ab172730</u> is also shown.

The ChIP data was conducted on chromatin prepared from HepG2 cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with 10^7 HepG2 cells and 8 µg of <u>ab92378</u>. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads.

Additional screenshots of mapped reads can be downloaded here.

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

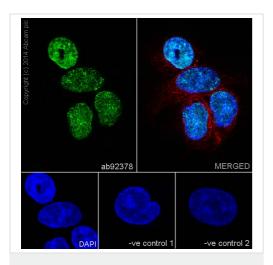
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92378).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF-4-alpha antibody
[EPR3648] - BSA and Azide free (ab227997)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling HNF-4-alpha with purified <u>ab92378</u> at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <u>ab97051</u>, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92378).



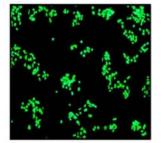
Immunocytochemistry/ Immunofluorescence - Anti-HNF-4-alpha antibody [EPR3648] - BSA and Azide free (ab227997)

Immunocytochemistry/Immunofluorescence analysis of HepG2 cells labelling HNF-4 with purified <u>ab92378</u> at 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. <u>ab150077</u>, an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. <u>ab7291</u>, a mouse anti-tubulin (1/500) and <u>ab150120</u>, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500) were also used.

Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500).

Control 2: $\underline{ab7291}$ (1/1000) and secondary antibody, $\underline{ab150077}$, an Alexa Fluor® 488-conjugated goat anti-rabbit lgG (1/500).

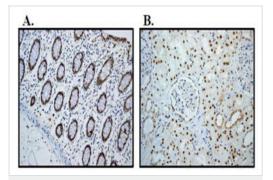
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92378).



Immunocytochemistry/ Immunofluorescence - Anti-HNF-4-alpha antibody [EPR3648] - BSA and Azide free (ab227997)

Immunocytochemistry/Immunfluorescence analysis of HepG2 cells labelling HNF-4-alpha with unpurified <u>ab92378</u> at a 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92378).

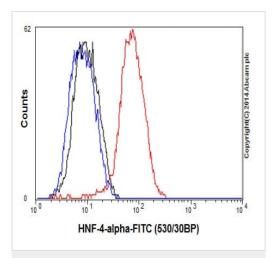


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF-4-alpha antibody
[EPR3648] - BSA and Azide free (ab227997)

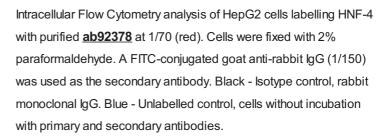
This IHC data was generated using the same anti-HNF4 alpha antibody clone, EPR3648, in a different buffer formulation (cat# **ab92378**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue (A) and human kidney tissue (B) labelling HNF-4-aplha with unpurified **ab92378** at a 1/100 dilution. Detection: DAB staining.

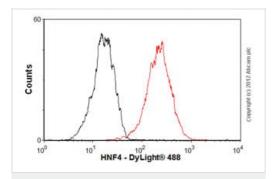
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-HNF-4-alpha antibody [EPR3648] - BSA and Azide free (ab227997)



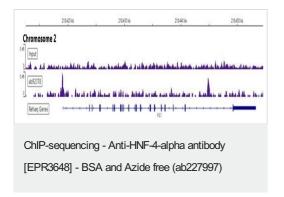
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92378).



Flow Cytometry (Intracellular) - Anti-HNF-4-alpha antibody [EPR3648] - BSA and Azide free (ab227997)

Overlay histogram showing HepG2 cells stained with unpurified $\underline{ab92378}$ (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (unpurified $\underline{ab92378}$, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight[®] 488 goat anti-rabbit lgG (H+L) ($\underline{ab96899}$) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1 μ g/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HepG2 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92378).



Chromatin was prepared from HepG2 (Human liver hepatocellular carcinoma cell line) cells. ChIP was performed with 10 7 HepG2 cells and 8 μ g of <u>ab92378</u> [EPR3648]. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads.

Additional screenshots of mapped reads can be downloaded **here.**

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92378).



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