abcam

Product datasheet

Anti-HNF1 alpha antibody [EPR23054-108] - BSA and Azide free ab272708

יובעדער RabMAb

1 References 画像数6

製品の概要

製品名 Anti-HNF1 alpha antibody [EPR23054-108] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR23054-108] to HNF1 alpha - BSA and Azide free

由来種 Rabbit

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

適用なし: ChIP or IP

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, Caco-2 and Hepa1-6 whole cell lysate; Mouse liver lysate; Rat liver lysate. IHC-P:

Human liver and colon tissues. ICC/IF: HepG2 cells. Flow Cyt (intra): HepG2 cells.

ChIC/CUT&RUN-Seq: HepG2 cells.

特記事項 ab272708 is the carrier-free version of ab272693.

> 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.

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

1

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: 7.2

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

クローン名 EPR23054-108

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ab272708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
ChIC/CUT&RUN-seq		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 81 kDa (predicted molecular weight: 67 kDa).

追加情報 Is unsuitable for ChIP or IP.

ターゲット情報

機能 Transcriptional activator that regulates the tissue specific expression of multiple genes, especially

in pancreatic islet cells and in liver. Required for the expression of several liver specific genes.

Binds to the inverted palindrome 5'-GTTAATNATTAAC-3'.

組織特異性 Liver.

関連疾患 Defects in HNF1A are a cause of hepatic adenomas familial (HEPAF) [MIM:142330]. Hepatic

adenomas are rare benign liver tumors of presumable epithelial origin that develop in an otherwise normal liver. Hepatic adenomas may be single or multiple. They consist of sheets of well-differentiated hepatocytes that contain fat and glycogen and can produce bile. Bile ducts or portal areas are absent. Kupffer cells, if present, are reduced in number and are non-functional. Conditions associated with adenomas are insulin-dependent diabetes mellitus and glycogen

storage diseases (types 1 and 3). Note=Bi-allelic inactivation of HNF1A, whether sporadic or associated with MODY3, may be an early step in the development of some hepatocellular carcinomas.

Defects in HNF1A are the cause of maturity-onset diabetes of the young type 3 (MODY3) [MIM:600496]; also symbolized MODY-3. 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.

Defects in HNF1A are the cause of susceptibility to diabetes mellitus insulin-dependent type 20 (IDDM20) [MIM:612520]. IDDM20 is a multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical fetaures are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These features can result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels.

配列類似性

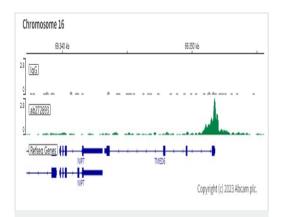
Belongs to the HNF1 homeobox family.

Contains 1 homeobox DNA-binding domain.

細胞内局在

Nucleus.

画像



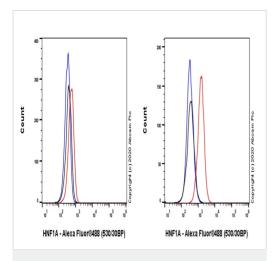
ChIC/CUT&RUN sequencing - Anti-HNF1 alpha antibody [EPR23054-108] - BSA and Azide free (ab272708)

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 5µg of <u>ab272693</u> [EPR23054-108]. 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.

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 (<u>ab272693</u>).

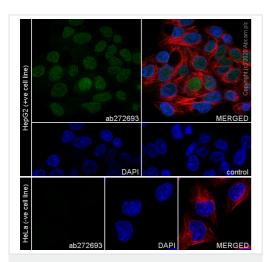


Flow Cytometry (Intracellular) - Anti-HNF1 alpha antibody [EPR23054-108] - BSA and Azide free (ab272708)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized HeLa (Human cervix adenocarcinoma epithelial cell, Left) / HepG2 (Human hepatocellular carcinoma epithelial cell, Right) cells labelling HNF1 alpha with ab272693 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor®488, ab150077) at 1/2000 dilution was used as the secondary antibody.

Negative control: HeLa (PMID: 10677375).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab272693).

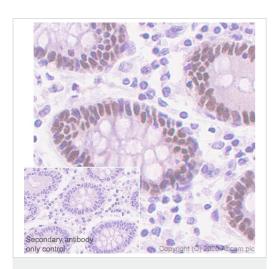


Immunocytochemistry/ Immunofluorescence - Anti-HNF1 alpha antibody [EPR23054-108] - BSA and Azide free (ab272708)

Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized HepG2 and HeLa cells labelling HNF1 alpha with ab272693 at 1/1000 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing nuclear staining in HepG2 cells. 100% methanol fixation is recommended. Negative control: HeLa (PMID: 10677375). ab195889 Anti-alpha Tubulin antibody (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab272693).



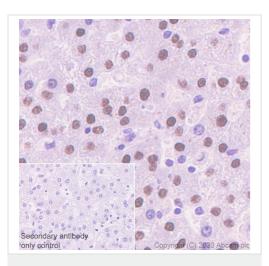
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF1 alpha antibody
[EPR23054-108] - BSA and Azide free (ab272708)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling HNF1 alpha with <u>ab272693</u> at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Nuclear staining on human colon. The section was incubated with <u>ab272693</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab272693).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF1 alpha antibody

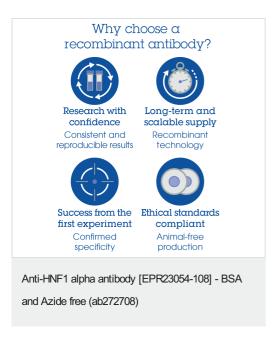
[EPR23054-108] - BSA and Azide free (ab272708)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling HNF1 alpha with <u>ab272693</u> at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Nuclear staining on human liver. The section was incubated with <u>ab272693</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and



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