abcam

Product datasheet

Anti-HNF1 alpha antibody ab96777

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Overview

Immunogen

Product name Anti-HNF1 alpha antibody

Description Rabbit polyclonal to HNF1 alpha

Host species Rabbit

Tested applications Suitable for: IP, WB, IHC-P, ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Cow, Pig

Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HepG2 whole cell lysate IHC-P: A549 Xenograft

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions 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.

Storage buffer pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

Purification notes Purified by antigen-affinity chromatography.

Clonality Polyclonal

Isotype IgG

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab96777 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
IP		Use at an assay dependent concentration.
WB	★★ 爺 爺 爺 (1)	1/500 - 1/3000. Detects a band of approximately 81 kDa (predicted molecular weight: 67 kDa). Lysates should be made freshly and used in WB immediately to minimize protein degradation.
IHC-P		1/100 - 1/250.
ICC/IF		1/100 - 1/1000. Recommend using PFA fixation instead of Methanol fixation.

Target

Function

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'.

Tissue specificity

Involvement in disease

Liver.

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 developmant 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.

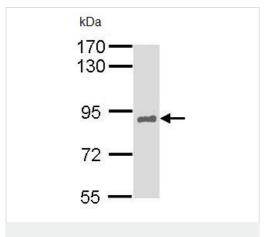
Sequence similarities

Belongs to the HNF1 homeobox family.

Contains 1 homeobox DNA-binding domain.

Cellular localization

Nucleus.



Western blot - Anti-HNF1 alpha antibody (ab96777)

Anti-HNF1 alpha antibody (ab96777) at 1/5000 dilution + HepG2 whole cell lysate at 30 μg

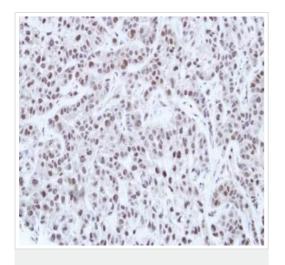
Predicted band size: 67 kDa **Observed band size:** 81 kDa

7.5% SDS PAGE

Blocking: 5% non-fat milk in TBST, room temperature, 60 minutes.

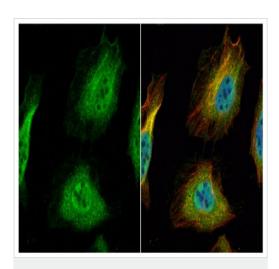
Lysates should be made freshly and used in WB immediately to minimize protein degradation. The molecular weight observed is consistent with what has been described in the literature (PMID:31145732).

Negative control: HeLa (PMID: 12488960). Also, 293T and A431.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HNF1 alpha antibody (ab96777)

ab 96777, at a 1/100 dilution, staining HNF1 alpha in paraffin embedded A549 Xenograft by Immunohistochemistry.



Immunocytochemistry/ Immunofluorescence - Anti-HNF1 alpha antibody (ab96777)

ab96777 staining HNF1 alpha in HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% paraformaldehyde at room temperature for 15 minutes. Samples were incubated with primary antibody (1/1000) at 4°C overnight and stained green, alpha tubulin stained red and Hoecsht 33342 stained blue.

Permeabilization: 0.1% Triton X-100 in PBS, 4 minutes.

Blocking: 2.5% BSA/PBS for 30 minutes.

Secondary antibody: Rabbit lgG antibody (Alexa Fluor 488), 1:2000 (keep from light), room temperature for 1 hour.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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