

Anti-HNF1 beta antibody [4A1] ab124351

2 Images

Overview

Product name	Anti-HNF1 beta antibody [4A1]
Description	Mouse monoclonal [4A1] to HNF1 beta
Tested applications	WB, ELISA, IHC-P, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment corresponding to Human HNF1 beta aa 29-118. Partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Positive control	Human small intestine tissue. HepG2 cells.

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: 7.20 Constituent: 99% PBS Sourced in Ascites.
Purity	Protein A purified
Clonality	Monoclonal
Clone number	4A1
Isotype	IgG2a
Light chain type	kappa
Research Areas	Epigenetics and Nuclear Signaling → Transcription → Other factors Metabolism → Types of disease → Diabetes

Applications

Our [Abpromise guarantee](#) covers the use of **ab124351** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Notes
WB	1/500 - 1/1000. Predicted molecular weight: 61 kDa. with recombinant protein
ELISA	Use at an assay dependent concentration.
IHC-P	Use a concentration of 10 µg/ml.
Flow Cyt	Use 0.1µg for 10 ⁶ cells.

Target

Function	Transcription factor, probably binds to the inverted palindrome 5'-GTTAATNATTAAC-3'.
Involvement in disease	Defects in HNF1B are the cause of renal cysts and diabetes syndrome (RCAD) [MIM:137920]; also called maturity-onset diabetes of the young type 5 (MODY5) or familial hypoplastic glomerulocystic kidney disease (GCKD). RCAD is an autosomal dominant disorder comprising non-diabetic renal disease resulting from abnormal renal development, and diabetes, which in some cases occurs earlier than age 25 years and is thus consistent

with a diagnosis of maturity-onset diabetes of the young (MODY5). The renal disease is highly variable and includes renal cysts, glomerular tufts, aberrant nephrogenesis, primitive tubules, irregular collecting systems, oligomeganephronia, enlarged renal pelves, abnormal calyces, small kidney, single kidney, horseshoe kidney, and hyperuricemic nephropathy.

Defects in HNF1B may be rare genetic risk factor contributing to the development of non-insulin-dependent diabetes mellitus (NIDDM) [MIM:125853]. NIDDM is characterized by an autosomal dominant mode of inheritance, onset during adulthood and insulin resistance.

Defects in HNF1B may be a cause of susceptibility to prostate cancer hereditary type 11 (HPC11) [MIM:611955]. It is a condition associated with familial predisposition to cancer of the prostate. Most prostate cancers are adenocarcinomas that develop in the acini of the prostatic ducts. Other rare histopathologic types of prostate cancer that occur in approximately 5% of patients include small cell carcinoma, mucinous carcinoma, prostatic ductal carcinoma, transitional cell carcinoma, squamous cell carcinoma, basal cell carcinoma, adenoid cystic carcinoma (basaloid), signet-ring cell carcinoma and neuroendocrine carcinoma.

Sequence similarities Belongs to the HNF1 homeobox family.
Contains 1 homeobox DNA-binding domain.

Cellular localization Nucleus.

Target information above from: UniProt accession [P35680](#)
The UniProt Consortium
The Universal Protein Resource (UniProt) in 2010
[Nucleic Acids Res. 38:D142-D148 \(2010\)](#) .

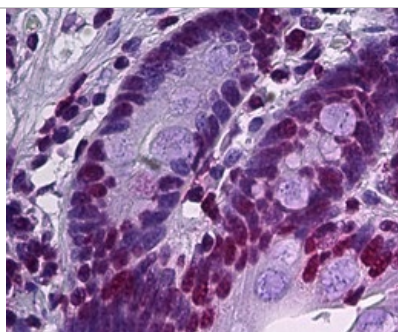
Database links

- [Entrez Gene: 6928 Human](#)
- [Omim: 189907 Human](#)
- [SwissProt: P35680 Human](#)
- [Unigene: 191144 Human](#)

Alternative names

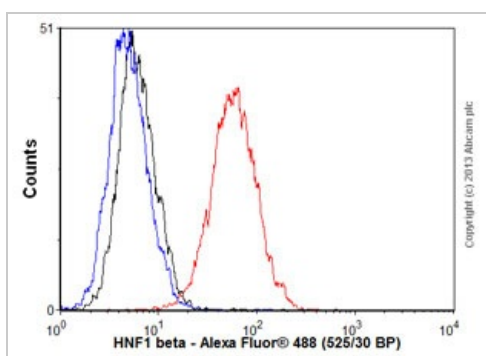
- FJHN antibody
- Hepatocyte nuclear factor 1 beta antibody
- Hepatocyte nuclear factor 1-beta antibody
- HNF 1B antibody
- HNF 2 antibody
- HNF-1-beta antibody
- HNF-1B antibody
- HNF1 beta antibody
- HNF1 homeobox B antibody
- HNF1B antibody
- HNF1B_HUMAN antibody
- HNF1beta antibody
- HNF2 antibody
- Homeoprotein LF B3 antibody
- Homeoprotein LFB3 antibody
- HPC11 antibody
- LF B3 antibody
- LFB3 antibody
- MODY 5 antibody
- MODY5 antibody
- TCF 2 antibody
- TCF 2 protein antibody
- TCF-2 antibody
- TCF2 antibody
- TCF2 protein antibody
- Transcription factor 2 antibody
- Transcription factor 2 hepatic antibody
- Variant hepatic nuclear factor 1 antibody
- Variant hepatic nuclear factor antibody
- VHNF 1 antibody
- vHNF1 antibody

Anti-HNF1 beta antibody [4A1] images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TCF2 antibody [4A1] (ab124351)

ab124351, at 10ug/ml, staining TCF2 in formalin-fixed paraffin-embedded Human small intestine tissue by Immunohistochemistry.



Flow Cytometry - Anti-HNF1 beta antibody [4A1] (ab124351)

Overlay histogram showing HepG2 cells (ab7900) stained with ab124351 (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 (ab7481) / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab124351, 0.1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICGG1] (ab91353, 1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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Cambridge Office

Abcam plc
330 Cambridge Science Park Cambridge CB4 0FL UK
Tel: +44 (0)1223 696000
Fax: +44 (0)1223 215 215
Email: orders@abcam.com

Boston Office

Abcam Inc.
1 Kendall Square, Suite B2304 Cambridge, MA 02139-1517 USA
Tel: (888) 77-ABCAM (22226)
Fax: (877) 774-8286
These numbers are toll free in the US/Canada
Email: us.orders@abcam.com

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