

HNF4A recombinant antibody

HNF4A Recombinant Monoclonal Antibody

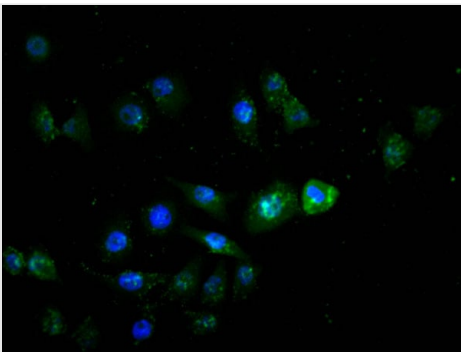
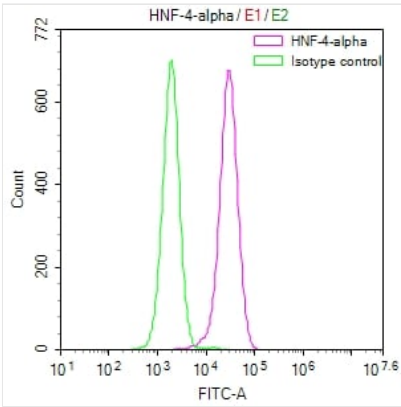
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA279131	HEK293F Cell	Human, Rat	Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry, Western Blot, ELISA

PRODUCT SYNONYMS

HNF4A; Monoclonal Recombinant Antibody; HNF4A Recombinant Monoclonal Antibody; Hepatocyte nuclear factor 4-alpha (HNF-4-alpha)(Nuclear receptor subfamily 2 group A member 1)(Transcription factor 14)(TCF-14)(Transcription factor HNF-4); HNF4 NR2A1 TCF14; HNF4A recombinant antibody

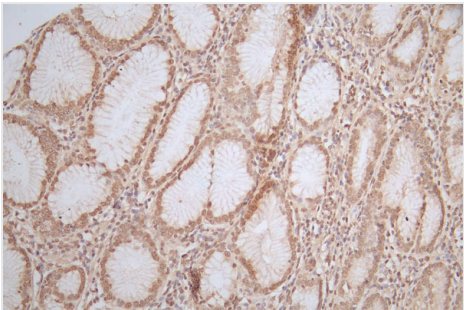
PRODUCT SPECIFICATIONS

Host	HEK293F Cell
Reactivity	Human, Rat
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	10A7
Purity/Purification	Affinity-chromatography
Form/Format	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Applicable Applications for HNF4A recombinant antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot), ELISA
Immunogen Species	Human
Immunogen	A synthesized peptide derived from Human HNF4A
Conjugation	Non-conjugated
Research Area	Epigenetics and Nuclear Signaling; Cancer; Cardiovascular; Developmental biology; Metabolism; Signal transduction
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

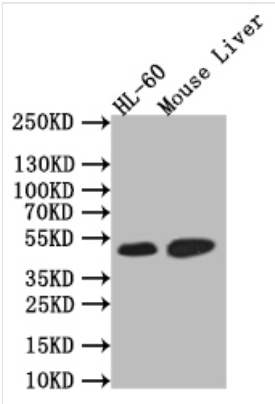


IF (Immunofluorescence)
Immunofluorescence staining of MCF-7 with AAA279131 at 1:20, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 526-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

FCM/FACS (Flow Cytometry)
Overlay Peak curve showing HepG2 cells stained with AAA279131 (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10⁶cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1ug/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.



IHC (Immunohiostchemistry)
IHC image of AAA279131 diluted at 1:50 and staining in paraffin-embedded human gastric cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.75% DAB.



WB (Western Blot)
Western BlotPositive WB detected in: HL-60 whole cell lysate, Rat Liver tissue lysate,All lanes: HNF-4-alpha antibody at 1:1000SecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 52 kDaObserved band size: 52 kDa

ADDITIONAL INFORMATION

Related Product Information for HNF4A recombinant antibody

A recombinant monoclonal antibody targeting HNF4A was generated through a series of steps. Initially, a rabbit was immunized with a synthesized peptide derived from human HNF4A protein. B cells were then isolated from the immunized rabbit, and RNA was extracted from these cells. The RNA was reverse-transcribed into cDNA, which was utilized as a template to extend HNF4A antibody genes using degenerate primers. These engineered HNF4A antibody genes were incorporated into a plasmid vector and introduced into host cells for expression. The resultant HNF4A recombinant monoclonal antibody was subsequently purified from the cell culture supernatant via affinity chromatography and evaluated for its performance in ELISA, WB, IHC, IF, and FC applications, demonstrating specific recognition of human and rat HNF4A protein. The HNF4A protein is a critical transcription factor that regulates gene expression in various tissues, with a primary focus on the liver. Its functions are essential for maintaining metabolic homeostasis, organ development, and the proper functioning of multiple physiological processes, including glucose and lipid metabolism, detoxification, and pancreatic function.

NCBI AND UNIPROT INFORMATION

NCBI GI #	31077205
NCBI GeneID	3172

NCBI Accession #	NP_000448.3
NCBI GenBank Nucleotide #	NM_000457.4
UniProt Accession #	P41235 ; O00659 ; O00723 ; Q14540 ; Q5QPB8 ; Q6B4V5 ; Q6B4V6 ; Q6B4V7 ; Q92653 ; Q92654 ; A5JW41 ; B2RPP8
NCBI Official Full Name	hepatocyte nuclear factor 4-alpha isoform b
NCBI Official Synonym Full Names	hepatocyte nuclear factor 4, alpha
NCBI Official Symbol	HNF4A
NCBI Official Synonym Symbols	TCF; HNF4; MODY; MODY1; NR2A1; TCF14; HNF4a7; HNF4a8; HNF4a9; NR2A21; HNF4alpha
NCBI Protein Information	hepatocyte nuclear factor 4-alpha; TCF-14; HNF4alpha10/11/12; transcription factor 14; transcription factor HNF-4; hepatic nuclear factor 4 alpha; nuclear receptor subfamily 2 group A member 1
UniProt Protein Name	Hepatocyte nuclear factor 4-alpha
UniProt Gene Name	HNF4A
UniProt Synonym Gene Names	HNF4; NR2A1; TCF14; HNF-4-alpha; TCF-14
UniProt Entry Name	HNF4A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/hnf4a-recombinant-antibody-clone-10a7-flow-cytometry-immunofluorescence-immunohistochemistry-western-blot-elisa/279131>