

Basic Information

Product Name	Anti-HNF4A Antibody (Clone#6C8E9)	
Gene Name	HNF4A	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2a	
Species Reactivity	human, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human HNF-4-alpha recombinant protein (Position: Q164-I474). Human HNF-4-alpha shares 95% and 96% amino acid (aa) sequence identity with mouse and rat HNF-4-alpha, respectively.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	53 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

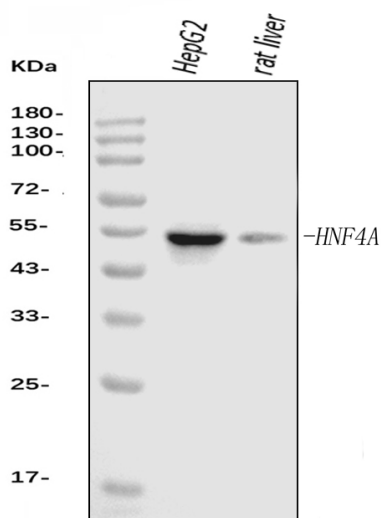
12 months from date of receipt, -20°C as supplied.

Background Information

Hepatocyte nuclear factor 4 alpha (HNF4A), also known as NR2A1, is a nuclear receptor that in humans is encoded by the HNF4A gene. It is mapped to 20q13.12. HNF4A is a nuclear transcription factor that binds DNA as a homodimer. The encoded protein controls the expression of several genes, including hepatocyte nuclear factor 1 alpha, a transcription factor which regulates the expression of several hepatic genes. This gene plays a role in development of the liver, kidney, and intestines. HNF4A is required for the PXR and CAR-mediated transcriptional activation of CYP3A4. This gene also plays a pivotal role in the expression and synthesis of SHBG, an important glycoprotein made primarily in the liver,

which in addition to lowering insulin-resistance also serves in reducing levels of free Oestrogen as-well as prolonging the half-life of Testosterone.

Selected Validation Data



Western blot analysis of HNF4A using anti-HNF4A antibody

(M00389-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

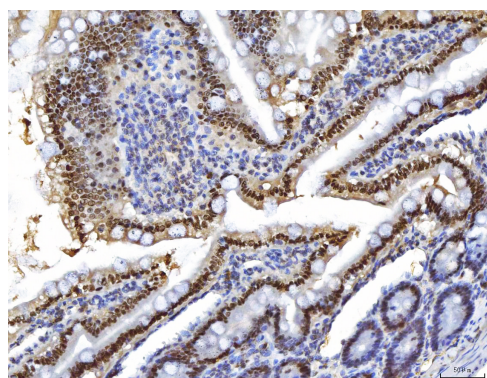
Lane 1: HEPG2 whole cell lysates,

Lane 2: rat liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with mouse anti-HNF4A antigen affinity purified monoclonal antibody (M00389-2) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050).

The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for HNF4A at approximately 53 kDa. The expected band size for HNF4A is at 53 kDa.



IHC analysis of HNF4A using anti-HNF4A antibody (M00389-2).

HNF4A was detected in a paraffin-embedded section of rat colon tissue.

The tissue section was incubated with mouse anti-HNF4A Antibody (M00389-2) at a dilution of 1:200 and developed using HRP

Conjugated mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB (Catalog # AR1027) as the chromogen.

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