

Basic Information

Product Name	Anti-HNF4A Antibody
Gene Name	HNF4A
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, ICC/IF, FCM
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) sequences identity with mouse and rat HNF-4-alpha, respectively.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	53 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (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

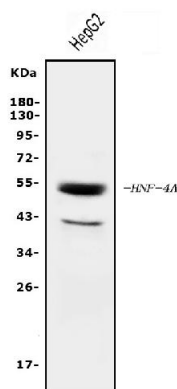
Hepatocyte nuclear factor 4 alpha (HNF4A), also known as NR2A1, is a nuclear receptor that in humans is encoded by the HNF4A gene. It is mapped to 20q13.12. HNF4A is a nuclear transcription factor that binds DNA as a homodimer. The encoded protein controls the expression of several genes, including hepatocyte 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.

Reference

Anti-HNF4A Antibody被引用在2文献中。

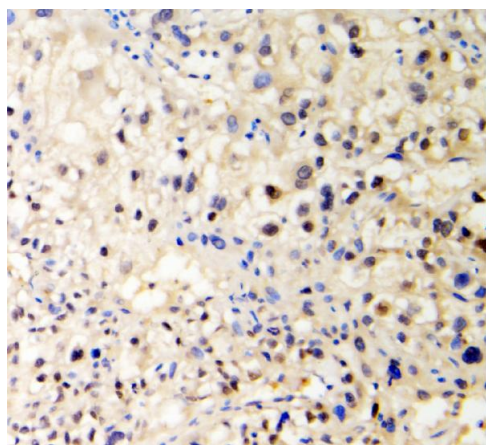
Selected Validation Data



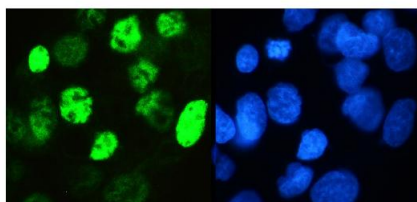
Western blot analysis of HNF4A using anti-HNF4A antibody (PB9215). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HEPG2 whole cell lysates.

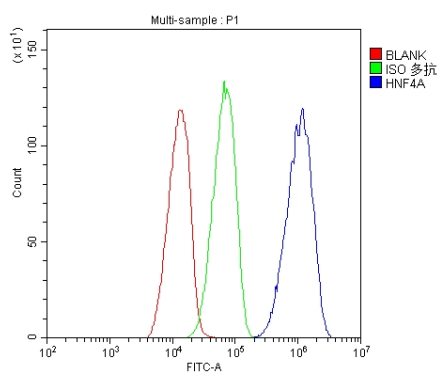
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-HNF4A antigen affinity purified polyclonal antibody (PB9215) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed 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 (PB9215). HNF4A was detected in a paraffin-embedded section of human liver cancer tissue. The tissue section was incubated with rabbit anti-HNF4A Antibody (PB9215) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of HNF-4-alpha using anti-HNF-4-alpha antibody (PB9215). HNF-4-alpha was detected in immunocytochemical section of HEPG2 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2 μ g/mL rabbit anti-HNF-4-alpha Antibody (PB9215) overnight at 4 $^{\circ}$ C. Fluoro488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 $^{\circ}$ C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of HEPG2 cells using anti-HNF-4-alpha antibody (PB9215). Overlay histogram showing HEPG2 cells stained with PB9215 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HNF-4-alpha Antibody (PB9215, 1:100) for 30 min at 20 $^{\circ}$ C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody for 30 minutes at 20 $^{\circ}$ C. Isotype control antibody (Green line) was rabbit IgG (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.