

# HNF4A Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2778c

# **Product Information**

Application Primary Accession	IHC-P, IF, FC, WB, E <u>P41235</u>
Other Accession	<u>P22449, P49698</u>
Reactivity	Human, Rat
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52785
Antigen Region	281-312

### **Additional Information**

Gene ID	3172
Other Names	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, HNF4A, HNF4, NR2A1, TCF14
Target/Specificity	This HNF4A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 281-312 amino acids from the Central region of human HNF4A.
Dilution	IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HNF4A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	HNF4A
Synonyms	HNF4, NR2A1, TCF14

FunctionTranscriptional regulator which controls the expression of hepatic genes<br/>during the transition of endodermal cells to hepatic progenitor cells,<br/>facilitating the recruitment of RNA pol II to the promoters of target genes<br/>(PubMed:<u>30597922</u>). Activates the transcription of CYP2C38 (By similarity).<br/>Represses the CLOCK-BMAL1 transcriptional activity and is essential for<br/>circadian rhythm maintenance and period regulation in the liver and colon<br/>cells (PubMed:<u>30530698</u>).Cellular LocationNucleus.

# Background

HNF4A is a nuclear transcription factor which binds DNA as a homodimer. This 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 protein may play a role in development of the liver, kidney, and intestines. Mutations in HNF4A gene have been associated with monogenic autosomal dominant non-insulin-dependent diabetes mellitus type I.

# References

Kritis A.A., Argyrokastritis A.Gene 173:275-280(1996) Yamagata K., Furuta H., Oda N.Nature 384:458-460(1996) Furuta H., Iwasaki N., Oda N.Diabetes 46:1652-1657(1997) Moeller A.M., Urhammer S.A.Diabetologia 40:980-983(1997)

#### Images



HNF4A Antibody (Center) (Cat. #AP2778c) western blot analysis in 293,HepG2 cell line and rat liver tissue lysates (35ug/lane).This demonstrates the HNF4A antibody detected the HNF4A protein (arrow).



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(AP2778c)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of HNF4A Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of HNF4A Antibody (Center)(Cat#AP2778c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555



phalloidin (red).DAPI was used to stain the cell nuclear (blue).



HNF4A Antibody (Center) (Cat. #AP2778c) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.