

Rabbit HNF4 alpha Polyclonal Antibody | anti-HNF4A antibody

Phospho-HNF4 alpha (Ser313) Antibody

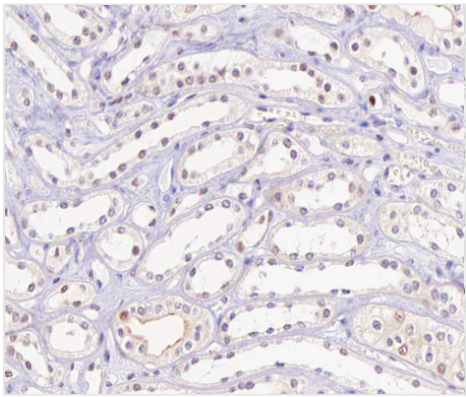
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321615	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

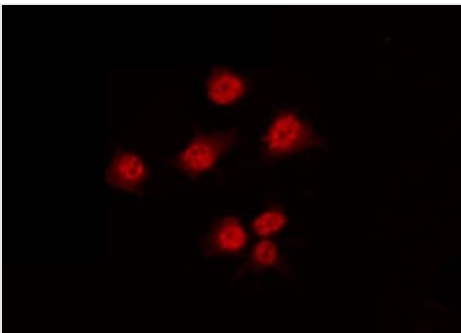
HNF4 alpha; Polyclonal Antibody; Phospho-HNF4 alpha (Ser313) Antibody; FLJ39654; FRTS4; Hepatic nuclear factor 4 alpha; Hepatocyte nuclear factor 4 alpha; Hepatocyte nuclear factor 4; Hepatocyte nuclear factor 4-alpha; HNF 4 alpha; HNF 4; HNF-4-alpha; HNF4; HNF4A; HNF4A_HUMAN; HNF4a7; HNF4a8; HNF4a9; Hnf4alpha; HNF4alpha10/11/12; MODY 1; MODY; MODY1; NR2A1; NR2A21; Nuclear receptor subfamily 2 group A member 1; OTTHUMP00000031060; OTTHUMP00000031062; TCF 14; TCF; TCF-14; TCF14; Tcf4; Transcription factor 14; hepatic nuclear factor; Transcription factor HNF 4; Transcription factor HNF-4; Transcription factor HNF4; anti-HNF4A antibody

PRODUCT SPECIFICATIONS

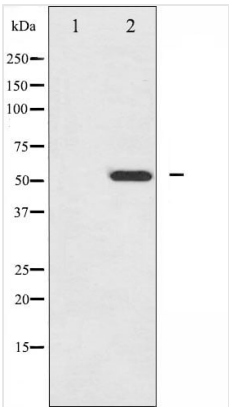
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-HNF4 alpha (Ser313) antibody detects endogenous levels of HNF4 alpha only when phosphorylated at Serine 313
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	474
Applicable Applications for anti-HNF4A antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human HNF4 alpha around the phosphorylation site of Serine 313
Subcellular Location	Nucleus.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (82%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (82%), Xenopus (82%)
Conjugation	Unconjugated
Epitope	Phospho Ser313
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



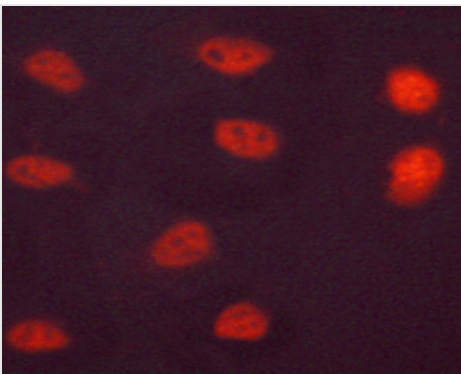
IHC (Immunohistochemistry)
AAA321615 at 1/100 staining human kidney carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



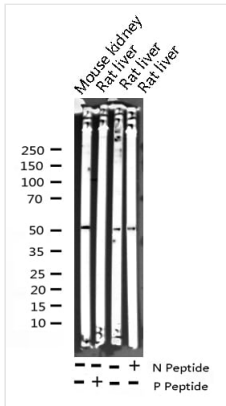
IF (Immunofluorescence)
AAA321615 staining HT29 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of HNF4 alpha phosphorylation expression in EGF treated HuvEc whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)
AAA321615 staining LOVO cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37 degree C. The primary antibody was diluted 1/400 and incubated with the sample for 1 hour at 37 degree C. A Alexa Fluor 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary antibody.



WB (Western Blot)
Western blot analysis of Phospho-HNF4 alpha (Ser313) expression in various lysates

ADDITIONAL INFORMATION

Related Product Information for anti-HNF4A antibody	Description: The protein encoded by this gene is a nuclear transcription factor which 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. Function: Transcriptionally controlled transcription factor. Binds to DNA sites required for the transcription of alpha 1-antitrypsin, apolipoprotein CIII, transthyretin genes and HNF1-alpha. May be essential for development of the liver, kidney and intestine. Subunit Structure: Homodimerization is required for HNF4-alpha to bind to its recognition site. Interacts with PER2. Post-translational Modifications: Phosphorylated on tyrosine residue(s); phosphorylation is important for its DNA-binding activity. Phosphorylation may directly or indirectly play a regulatory role in the subnuclear distribution. Phosphorylation at Ser-313 by AMPK reduces the ability to form homodimers and bind DNA. Acetylation at Lys-458 lowers transcriptional activation by about two-fold. Similarity: Belongs to the nuclear hormone receptor family. NR2 subfamily.
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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
Molecular Weight	Observed: 52 kDa Predicted: 53 kDa
NCBI Official Full Name	hepatocyte nuclear factor 4-alpha isoform 2
NCBI Official Synonym Full Names	hepatocyte nuclear factor 4 alpha
NCBI Official Symbol	HNF4A
NCBI Official Synonym Symbols	TCF; HNF4; MODY; FRTS4; MODY1; NR2A1; TCF14; HNF4a7; HNF4a8; HNF4a9; NR2A21; HNF4alpha
NCBI Protein Information	hepatocyte nuclear factor 4-alpha
UniProt Protein Name	Hepatocyte nuclear factor 4-alpha
UniProt Gene Name	HNF4A
UniProt Synonym Gene Names	HNF4; NR2A1; TCF14; HNF-4-alpha; TCF-14

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.