10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HNF1A Rabbit pAb

Catalog # AP99838

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P20823
Other Accession	P20823
Reactivity	Rat, Human, Mouse
Predicted	Pig, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67386
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HNF1A
Epitope Specificity	11-110/631
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the HNF1 homeobox family. Contains 1 homeobox DNA-binding domain.
SUBUNIT	Binds DNA as a dimer. Interacts with PCBD1. Heterotetramer with PCBD1; formed by a dimer of dimers.
DISEASE	Hepatic adenomas familial (HEPAF) [MIM:142330]: Rare benign liver tumors of presumable epithelial origin that develop in an otherwise normal liver. Hepatic adenomas may be single or multiple. They consist of sheets of well-differentiated hepatocytes that contain fat and glycogen and can produce bile. Bile ducts or portal areas are absent. Kupffer cells, if present, are reduced in number and are non-functional. Conditions associated with adenomas are insulin-dependent diabetes mellitus and glycogen storage diseases (types 1 and 3). Note=The disease is caused by mutations affecting the gene represented in this entry. Bi-allelic inactivation of HNF1A, whether sporadic or associated with MODY3, may be an early step in the developmant of some hepatocellular carcinomas. Maturity-onset diabetes of the young 3 (MODY3) [MIM:600496]: A form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the beginning of the disease. Note=The disease is caused by mutations affecting the gene represented in this entry. Diabetes mellitus, insulin-dependent, 20 (IDDM20) [MIM:612520]: A multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical fetaures are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	IRF1 encodes interferon regulatory factor 1, a member of the interferon

regulatory transcription factor (IRF) family. IRF1 serves as an activator of interferons alpha and beta transcription, and in mouse it has been shown to be required for double-stranded RNA induction of these genes. IRF1 also functions as a transcription activator of genes induced by interferons alpha, beta, and gamma. Further, IRF1 has been shown to play roles in regulating apoptosis and tumor-suppressoion.

Additional Information

Gene ID	6927
Other Names	HNF-1-alpha; HNF-1A; HNF1; HNF1alpha; HNF4A; IDDM20; LFB1; MODY3; TCF-1; TCF1; HNF1-alpha; HNF1[a]; Hnf-1; LF-B1; HNF1A_HUMAN; HNF1A; Liver-specific transcription factor LF-B1 (LFB1); Transcription factor 1 (TCF-1); HNF1A_MOUSE; HNF1A_RAT; HNF1 homeobox A; transcription factor 1, hepatic; LF-B1, hepatic nuclear factor (HNF1), albumin proximal factor
Dilution	IHC-P=1:100-500,IHC-F=1:400-800,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	HNF1A
Synonyms	TCF1
Function	Transcriptional activator that regulates the tissue specific expression of multiple genes, especially in pancreatic islet cells and in liver (By similarity). Binds to the inverted palindrome 5'- GTTAATNATTAAC-3' (PubMed:10966642, PubMed:12453420). Activates the transcription of CYP1A2, CYP2E1 and CYP3A11 (By similarity).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108, ECO:0000269|PubMed:10966642, ECO:0000269|PubMed:38018242}
Tissue Location	Liver.

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