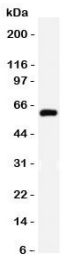
HNF1B Antibody / HNF1 beta (R31391)

Catalog No.	Formulation	Size
R31391	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P35680
Applications	Western blot: 0.5-1ug/ml
Limitations	This HNF1B antibody is available for research use only.



Western blot testing of HNF1B antibody and mouse liver lysate. Predicted molecular weight ~61 kDa.

Description

HNF1B antibody, also known as HNF1 beta antibody, recognizes Hepatocyte nuclear factor 1 beta, a homeodomain-containing transcription factor encoded by the human HNF1B gene located on chromosome 17q12. HNF1B is a member of the HNF1 family of transcription regulators and is predominantly localized to the nucleus, where it controls gene expression programs essential for epithelial differentiation and organ development. HNF1B antibody is widely used in research investigating renal, pancreatic, and hepatobiliary biology, as well as epithelial lineage specification.

Hepatocyte nuclear factor 1 beta contains a dimerization domain, a POU-specific DNA-binding domain, and a

transactivation domain that enables regulation of downstream target genes. HNF1B functions as a homodimer or heterodimer with HNF1 alpha, binding specific promoter regions to regulate genes involved in glucose metabolism, ion transport, and epithelial polarity. During embryogenesis, HNF1B plays a critical role in nephrogenesis, pancreatic duct development, and biliary tract formation. HNF1B antibody supports studies examining transcriptional regulation and developmental gene networks.

HNF1B expression is strongly detected in renal tubular epithelial cells, bile duct epithelium, pancreatic ductal cells, and certain reproductive tract epithelia. Genetic alterations in HNF1B are associated with renal cysts and diabetes syndrome and congenital anomalies of the kidney and urinary tract. In tumor research, nuclear HNF1B expression has been studied in ovarian clear cell carcinoma and select renal neoplasms, where it serves as a lineage-associated marker in research settings. HNF1B antibody enables evaluation of nuclear localization and epithelial differentiation status in normal and neoplastic tissues.

Beyond developmental contexts, HNF1B regulates genes involved in metabolic homeostasis and epithelial transport function. Dysregulation of HNF1B activity may contribute to metabolic abnormalities and organ dysfunction. HNF1B antibody supports investigation of transcriptional control mechanisms and organ-specific gene regulation in both physiologic and pathologic states.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the HNF1B antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human Hepatocyte nuclear factor 1 homeobox B (HMAQQPFMAAVTQLQN) was used as the immunogen for this HNF1B antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the HNF1B antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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