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Goat Anti-FOXA2 / HNF3B Antibody
Peptide-affinity purified goat antibody
Catalog # AF1426a

Specification

Goat Anti-FOXA2 / HNF3B Antibody - Product Information

Application	**WB**
Primary Accession	Q9Y261
Other Accession	NP_710141, 3170, 15376 (mouse), 25099 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**48306**

Goat Anti-FOXA2 / HNF3B Antibody - Additional Information

Gene ID 3170

Other Names
Hepatocyte nuclear factor 3-beta, HNF-3-beta, HNF-3B, Forkhead box protein A2, Transcription factor 3B, TCF-3B, FOXA2, HNF3B, TCF3B

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-FOXA2 / HNF3B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-FOXA2 / HNF3B Antibody - Protein Information

Name FOXA2

Synonyms HNF3B, TCF3B

Function
Transcription factor that is involved in embryonic development, establishment of tissue-specific gene expression and regulation of gene expression in differentiated tissues. Is thought to act as a 'pioneer' factor opening the compacted chromatin for other proteins through interactions with

nucleosomal core histones and thereby replacing linker histones at target enhancer and/or promoter sites. Binds DNA with the consensus sequence 5'- [AC]A[AT]T[AG]TT[GT][AG][CT]T[CT]-3' (By similarity). In embryonic development is required for notochord formation. Involved in the development of multiple endoderm-derived organ systems such as the liver, pancreas and lungs; FOXA1 and FOXA2 seem to have at least in part redundant roles. Originally described as a transcription activator for a number of liver genes such as AFP, albumin, tyrosine aminotransferase, PEPCK, etc. Interacts with the cis-acting regulatory regions of these genes. Involved in glucose homeostasis; regulates the expression of genes important for glucose sensing in pancreatic beta- cells and glucose homeostasis. Involved in regulation of fat metabolism. Binds to fibrinogen beta promoter and is involved in IL6- induced fibrinogen beta transcriptional activation.

Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:14500912}. Cytoplasm Note=Shuttles between the nucleus and cytoplasm in a CRM1-dependent manner; in response to insulin signaling via AKT1 is exported from the nucleus

Goat Anti-FOXA2 / HNF3B Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-FOXA2 / HNF3B Antibody - Images



AF1426a (1 µg/ml) staining of Human Liver lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-FOXA2 / HNF3B Antibody - Background

This gene encodes a member of the forkhead class of DNA-binding proteins. These hepatocyte nuclear factors are transcriptional activators for liver-specific genes such as albumin and transthyretin, and they also interact with chromatin. Similar family members in mice have roles in the regulation of metabolism and in the differentiation of the pancreas and liver. This gene has been linked to sporadic cases of maturity-onset diabetes of the young. Transcript variants encoding different isoforms have been identified for this gene.

Goat Anti-FOXA2 / HNF3B Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Foxa2 (HNF-3beta) regulates expression of hepatotrophic factor ALR in liver cells. Dayoub R, et al. Biochem Biophys Res Commun, 2010 May 14. PMID 20382118.
Hepatitis C virus differentially modulates activation of forkhead transcription factors and insulin-induced metabolic gene expression. Banerjee A, et al. J Virol, 2010 Jun. PMID 20357092.
Loss of FOXA1/2 is essential for the epithelial-to-mesenchymal transition in pancreatic cancer. Song Y, et al. Cancer Res, 2010 Mar 1. PMID 20160041.
A weighted false discovery rate control procedure reveals alleles at FOXA2 that influence fasting glucose levels. Xing C, et al. Am J Hum Genet, 2010 Mar 12. PMID 20152958.