

FOXA2 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP11120c

Specification

FOXA2 Antibody (Center) Blocking peptide - Product Information

Primary Accession

<u>Q9Y261</u>

FOXA2 Antibody (Center) Blocking peptide - 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

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FOXA2 Antibody (Center) Blocking peptide - 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

FOXA2 Antibody (Center) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

FOXA2 Antibody (Center) Blocking peptide - Images

FOXA2 Antibody (Center) Blocking peptide - Background

This gene encodes a member of the forkhead class of DNA-binding proteins. These hepatocyte nuclear factors aretranscriptional activators for liver-specific genes such as albuminand transthyretin, and they also interact with chromatin. Similarfamily members in mice have roles in the regulation of metabolismand in the differentiation of the pancreas and liver. This gene hasbeen linked to sporadic cases of maturity-onset diabetes of theyoung. Transcript variants encoding different isoforms have beenidentified for this gene.

FOXA2 Antibody (Center) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Banerjee, A., et al. J. Virol. 84(12):5936-5946(2010)Dayoub, R., et al. Biochem. Biophys. Res. Commun. 395(4):465-470(2010)Xing, C., et al. Am. J. Hum. Genet. 86(3):440-446(2010)Song, Y., et al. Cancer Res. 70(5):2115-2125(2010)