

Foxa2 antibody - middle region

Rabbit Polyclonal Antibody Catalog # Al11114

Specification

Foxa2 antibody - middle region - Product Information

Application WB
Primary Accession P35583

Other Accession <u>NM 010446</u>, <u>NP 034576</u>

Reactivity Human, Mouse, Rat, Rabbit, Pig, Horse,

Bovine, Dog

Predicted Human, Mouse, Rat, Rabbit, Bovine, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 48 KDa

Foxa2 antibody - middle region - Additional Information

Gene ID 15376

Alias Symbol HNF3-beta, HNF3beta, Hnf-3b, Hnf3b,

Tcf-3b, Tcf3b

Other Names

Hepatocyte nuclear factor 3-beta, HNF-3-beta, HNF-3B, Forkhead box protein A2, Foxa2, Hnf3b, Tcf-3b, Tcf3b

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-Foxa2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

Foxa2 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Foxa2 antibody - middle region - Protein Information

Name Foxa2

Synonyms Hnf3b, Tcf-3b, 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. FOXA1 and FOXA2 are essential for hepatic specification. FOXA1 and FOXA2 are required for morphogenesis and cell differentiation during formation of the lung. FOXA1 and FOXA2 are involved in bile duct formation; they positively regulate the binding glucocorticoid receptor/NR3C1 to the IL6 promoter. FOXA1 and FOXA2 regulate multiple phases of midbrain dopaminergic neuron development; they regulate expression of NEUROG2 at the beginning of mDA neurogenesis and of NR4A2 and EN1 in immature mDA neurons. Modulates the transcriptional activity of nuclear hormone receptors; inhibits ARmediated transcription from the LCN5 promoter. Binds to fibrinogen beta promoter and is involved in IL6-induced fibrinogen beta transcriptional activation. 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. In pancreatic beta cells activates transcription of potassium channel subunits KCNJ11 and ABCC8. Involved in regulation of fat metabolism; activates transcriptional programs of lipid metabolism and ketogenesis at low insulin state. Involved in transcriptional regulation of MUC2 in the intestine.

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:15616563}. 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

Tissue Location

Restricted mainly to endoderm-derived tissues (lung, liver, stomach, and small intestine). Expressed in epididymis with region-specific expression pattern: no expression is observed in initial segment, low expression in proximal caput, gradiently higher levels of expression in middle and distal caput and highest level in corpus and cauda (at protein level).

Foxa2 antibody - middle region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Foxa2 antibody - middle region - Images





