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Foxa2 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI11113

Product Information

Application	WB
Primary Accession	P35583
Other Accession	NM_010446, NP_034576
Reactivity	Mouse, Rat
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48498

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 - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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 AR- mediated 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.

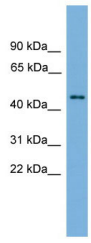
Cellular Location

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).

Images



WB Suggested Anti-Foxa2 Antibody Titration: 0.2-1 µg/ml
Positive Control: Mouse Thymus