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FOXA2 Antibody
Catalog # ASC11625

Specification

FOXA2 Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q9Y261
Other Accession	NP_068556, 3170
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 51 kDa** **Observed: 54 kDa KDa**
Application Notes	**FOXA2 Antibody can be used for detection of FOXA2 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

FOXA2 Antibody - Additional Information

Gene ID **3170**

Target/Specificity
FOXA2 antibody was raised against a 16 amino acid peptide near the center of human FOXA2 .

The immunogen is located within amino acids 280 - 330 of FOXA2.

Reconstitution & Storage
FOXA2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
FOXA2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FOXA2 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.

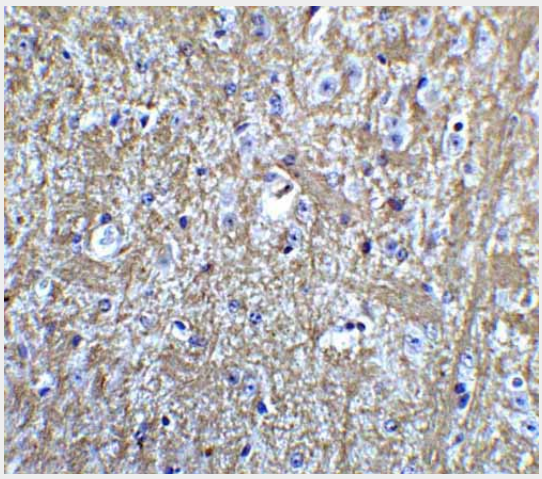
Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:14500912}. Cytoplasm Note=Shuttles between the nucleus and cytoplasm in a CRM1-dependent manner; in response to insulin signaling via AKT1 is exported from the nucleus

FOXA2 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

FOXA2 Antibody - Images



Immunohistochemistry of HES5 in mouse brain tissue with HES5 Antibodyat 5 µg/mL.

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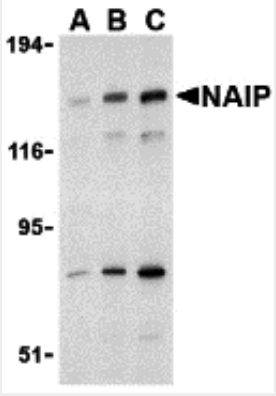

Western blot analysis of NAIP in human tonsil tissue lysate with NAIP antibody at 1 µg/mL.

FOXA2 Antibody - Background

FOXA2 Antibody: FOXA2 is one of three members of the FOXA family, a subset of the forkhead family of transcription factors which play vital roles in development. FOXA2 was initially identified through library screening as a closely related homolog of FOXA1. Both FOXA2 and FOXA1 act as transcriptional activators in adult liver and also play a role in body axis formation, neural tube patterning and definitive endoderm formation during gastrulation.

FOXA2 Antibody - References

Hannenhalli S and Kaestner KH. The evolution of Fox genes and their role in development and disease. Nat. Rev. Genet. 2009; 10:233-40.
Lai E, Prezioso VR, Tao WF, et al. Hepatocyte nuclear factor 3 alpha belongs to a gene family in mammals that is homologous to the Drosophila homeotic gene fork head. Genes Dev. 1991; 5:416-27.
Sasaki H and Hogn BL. Differential expression of multiple fork head related genes during gastrulation and axial pattern formation in the mouse embryo. Dev. 1993; 118:47-59.