

**FOXA2 Antibody**  
Catalog # ASC11625**Specification**

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**FOXA2 Antibody - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">O9Y261</a>
Other Accession	<a href="#">NP_068556</a> , <a href="#">3170</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 51 kDa

Application Notes	<b>Observed: 54 kDa KDa</b> <b>FOXA2 Antibody can be used for detection of FOXA2 by Western blot at 1 µg/mL.</b> <b>Antibody can also be used for immunohistochemistry starting at 5 µg/mL.</b> <b>For immunofluorescence start at 20 µg/mL.</b>
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**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.  
<br><br>The immunogen is located within amino acids 280 - 330 of FOXA2.

**Reconstitution & Storage**

FOXA2 antibody can be stored at 4°C for three months and -20°C, 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

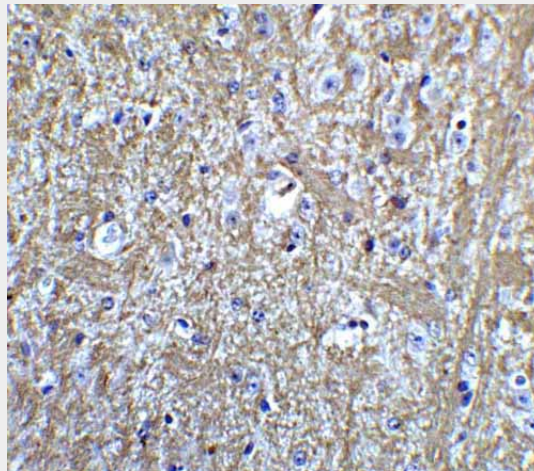
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:14500912}.  
Cytoplasm Note=Shuttles between the nucleus and cytoplasm in a CRM1-dependent manner; in response to insulin signaling via AKT1 is exported from the nucleus

#### FOXA2 Antibody - Protocols

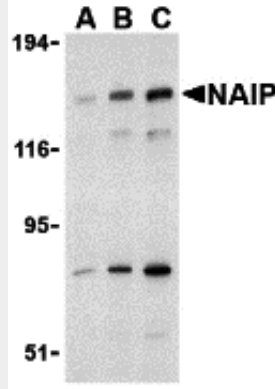
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### FOXA2 Antibody - Images



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



Western blot analysis of NAIP in human tonsil tissue lysate with NAIP antibody at 1  $\mu$ g/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.