

FOXA1 Antibody (Center S286) Blocking Peptide
Synthetic peptide
Catalog # BP14791c**Specification**

FOXA1 Antibody (Center S286) Blocking Peptide - Product InformationPrimary Accession [P55317](#)**FOXA1 Antibody (Center S286) Blocking Peptide - Additional Information****Gene ID** 3169**Other Names**

Hepatocyte nuclear factor 3-alpha, HNF-3-alpha, HNF-3A, Forkhead box protein A1, Transcription factor 3A, TCF-3A, FOXA1, HNF3A, TCF3A

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.

FOXA1 Antibody (Center S286) Blocking Peptide - Protein Information**Name** FOXA1**Synonyms** HNF3A, TCF3A**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). Proposed to play a role in translating the epigenetic signatures into cell type-specific enhancer-driven transcriptional programs. Its differential recruitment to chromatin is dependent on distribution of histone H3 methylated at 'Lys-5' (H3K4me2) in estrogen-regulated genes. Involved in the development of multiple endoderm-derived organ systems such as liver, pancreas, lung and prostate; FOXA1 and FOXA2 seem to have at least in part redundant roles (By similarity). Modulates the transcriptional activity of nuclear hormone receptors. Is involved in ESR1-mediated transcription; required for ESR1 binding to the NKX2-1 promoter in breast cancer cells; binds to the RPRM promoter and is required for the estrogen-induced repression of RPRM. Involved in regulation of apoptosis by inhibiting the expression of BCL2. Involved in cell cycle regulation by activating expression of CDKN1B, alone or in conjunction with BRCA1. 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.

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:15987773, ECO:0000269|PubMed:16331276}

Tissue Location

Highly expressed in prostate and ESR1-positive breast tumors. Overexpressed in esophageal and lung adenocarcinomas

FOXA1 Antibody (Center S286) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

FOXA1 Antibody (Center S286) Blocking Peptide - Images**FOXA1 Antibody (Center S286) Blocking Peptide - Background**

This gene encodes a member of the forkhead class of DNA-binding proteins. These hepatocyte nuclear factors are transcriptional activators for liver-specific transcripts such as albumin and transthyretin, and they also interact with chromatin. Similar family members in mice have roles in the regulation of metabolism and in the differentiation of the pancreas and liver.

FOXA1 Antibody (Center S286) Blocking Peptide - References

Hu, D.G., et al. Mol. Pharmacol. 78(4):714-722(2010) Zhang, Y., et al. J. Biol. Chem. 285(37):28604-28613(2010) Bernardo, G.M., et al. Development 137(12):2045-2054(2010) Liu, N., et al. Zhonghua Yi Xue Za Zhi 90(20):1403-1407(2010) Song, Y., et al. Cancer Res. 70(5):2115-2125(2010)