FOXA1 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	FOXA1, Blocking Peptide
Full Product Name	FOXA1 Blocking Peptide
Product Gene Name	FOXA1 blocking peptide
Product Synonym Names	forkhead box A1; Forkhead box protein A1; FOX A1; FOXA1; FOXA1_HUMAN; hepatocyte nuclear factor 3 alpha; Hepatocyte nuclear factor 3-alpha; HNF 3A; HNF-3-alpha; HNF-3A; HNF3A; MGC33105; TCF 3A; TCF-3A; TCF3A; Transcription factor 3A
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	FOXA1 peptide (MBS9627285) is used for blocking the activity of FOXA1 antibody (MBS9608573)
Molecular Weight	49148 MW
OMIM	602294
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for FOXA1 blocking peptide	Blocking/Control
Related Product Information for FOXA1 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of FOXA1 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for FOXA1 purchase	MBS9627285 is a blocking peptide targeting FOXA1.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for FOXA1. It may not necessarily be applicable to this product.

NCBI GI #	24497501
NCBI GeneID	3169
NCBI Accession #	NP_004487.2
UniProt Primary Accession #	P55317
UniProt Secondary Accession #	Q9H2A0; B2R9H6; B7ZAP5

UniProt Related Accession #	P55317
GenBank Nucleotide #	NM_004496.3
NCBI Official Full Name	hepatocyte nuclear factor 3-alpha
NCBI Official Synonym Full Names	forkhead box A1
NCBI Official Symbol	FOXA1
NCBI Official Synonym Symbols	HNF3A; TCF3A
UniProt Protein Name	Hepatocyte nuclear factor 3-alpha
UniProt Synonym Protein Names	Forkhead box protein A1; Transcription factor 3A; TCF-3A
Protein Family	Forkhead box protein
UniProt Gene Name	FOXA1
UniProt Synonym Gene Names	HNF3A; TCF3A; HNF-3-alpha; HNF-3A; TCF-3A
UniProt Entry Name	FOXA1_HUMAN
NCBI Protein Information	hepatocyte nuclear factor 3-alpha
NCBI Summary for FOXA1	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. [provided by RefSeq, Jul 2008]
UniProt Comments for FOXA1	FOXA1: 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'. 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. 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 promter 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 p27Kip1, alone or in conjunction with BRCA1. Originally discribed 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. Binds DNA as a monomer. Interacts with FOXA2. Interacts with NKX2-1. Interacts with HDAC7. Interacts with the histone H3-H4 heterodimer. Associates with nucleosomes containing histone H2A. Interacts with AR. Interacts with NR0B2. Highly expressed in prostate and ESR1-positive breast tumors. Overexpressed in esophageal and lung adenocarcinomas. Protein type: Transcription factor; DNA-binding Chromosomal Location of Human Ortholog: 14q21.1 Cellular Component: microvillus; nucleolus; nucleus Molecular Function: protein domain specific binding; DNA binding; sequence-specific DNA binding; transcription factor activity; transcription factor binding Biological Process: transcription from RNA polymerase II promoter; positive regulation of estrogen receptor signaling pathway; negative regulation of transcription from RNA polymerase II promoter; glucose homeostasis; positive regulation of mitotic cell cycle; response to estradiol stimulus; chromatin remodeling; anatomical structure formation; positive regulation of smoothened signaling pathway; hormone metabolic process; neuron fate specification; positive regulation of transcription factor activity; positive regulation of transcription from RNA polymerase II promoter; positive regulation of neuron differentiation; dorsoventral neural tube patterning

Research Articles on FOXA1	**1.** Findings suggested FOXA1 may act as an anti-oncogene in gastric cancer (GC) cells. Low-level expression of FOXA1 protein was confirmed in GC tissues and cell lines. FOXA1 over-expression could significantly affect cell proliferation, apoptosis and tumor invasion of GC cells, which may be resulted by reversing EMT.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/blocking-peptide/foxa1/9627285