

Product datasheet for TP525487

OriGene Technologies, Inc.

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Foxa1 (NM_008259) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse forkhead box A1 (Foxa1), with C-terminal MYC/DDK

tag, expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA Clone >MR225487 representing NM_008259

or AA Sequence: Red=Cloning site Green=Tags(s)

MLGTVKMEGHESNDWNSYYADTQEAYSSVPVSNMNSGLGSMNSMNTYMTMNTMTTSGNMTPASFN

MSYAN

TGLGAGLSPGAVAGMPGASAGAMNSMTAAGVTAMGTALSPGGMGSMGAQPATSMNGLGPYAAAMN

PCMSP

MAYAPSNLGRSRAGGGDAKTFKRSYPHAKPPYSYISLITMAIQQAPSKMLTLSEIYQWIMDLFPYYRQN QQRWQNSIRHSLSFNDCFVKVARSPDKPGKGSYWTLHPDSGNMFENGCYLRRQKRFKCEKQPGAGGGS

GG

GGSKGGPESRKDPSGPGNPSAESPLHRGVHGKASQLEGAPAPGPAASPQTLDHSGATATGGASELKSPAS SSAPPISSGPGALASVPPSHPAHGLAPHESQLHLKGDPHYSFNHPFSINNLMSSSEQQHKLDFKAYEQAL

QYSPYGATLPASLPLGSASVATRSPIEPSALEPAYYQGVYSRPVLNTS

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK

Predicted MW: 49.3 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.





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RefSeq: NP 032285

Locus ID: 15375 **UniProt ID:** P35582 RefSeq Size: 3188

Cytogenetics: 12 24.7 cM

RefSeq ORF: 1404

Synonyms: Hnf-3a; Hnf3a; Tcf-3a; Tcf3a

Summary: 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. Involved in the development of multiple endoderm-derived organ systems such as the liver, pancreas, lungs and prostate; FOXA1 and FOXA2 seem to have at least in part redundant roles. Plays a role in prostate morphogenesis and epithelial cell differentiation. 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 of 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

epithel independently from DNA-binding. Involved in regulation of apoptosis. Involved in cell cycle regulation. 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; activates the GCG

transcriptional activity of nuclear hormone receptors. Is involved in ESR1-mediated transcription. Inhibits NKX2-1-mediated transcription from the SFTPC promoter in lung

promoter.[UniProtKB/Swiss-Prot Function]