

Product datasheet for MR221285

Stox1 (NM_001033260) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Stox1 (NM_001033260) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Stox1
Synonyms:	4732470K04Rik; Gm63
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR221285 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGGCGCGGCCCGTGCAGCTGGCACCGGGTTCGCTGGCGTTGGTGTGAGCCCGGGAGGCCGGGCAGG
CGGCGGGGAGCCGGGCGGTCGCGCGCTTCCGCGCCTCCGCCGCGCAACGCGCGTCTTCTGGAA
CGCACGGCTGGCGCGCGCCCTCGCGGCTGGCCTTCTCGGCTGGCTGCGGCGCGGGGTGCTGCTGGT
CGCGCGCCCCAGCCCTGTGTGCAGGTGCTGCGGGATGCGTGGCGTCGCCGAGCCCTCGGCGCCCGGAG
GCTTCCGCATCACCGCGTGGGTGATGTCTCCAGTGCAAATGAGTCCCATAGCCAGTCCGGTTTGT
GCCTTGGCTGAAGTTCTCTGCTGTGCTATAGCTGATATGAACGCGGCTCAGGTGATGGTAACACAACAG
TCCTCTTGAGCACTTATCAACATTACCCAGGATTGCTGTTCCCTCCCGAGACATTCTCTACAGCA
CACTGGGAGCTCTAATCAAGAGAGGAAGATTTACCACACTGGAGAAGGCTACTTCATAGTTACCCCAAG
CACATACTTCATCACAATACGCCAATGCAGGGAAATAAAAGTGCTCTCCTGTCAAACGAAGGGTGTCTA
GGGCCACTTCTGGAACCTATCTGGTAAGTGTGGATTGCTGTGCAGAGCCGACCCAGGAGAATGAGGCTC
TCTTTCCCACTGTCCTCATGTGAGTGTACCCTGATACAAGCATGTGCGACTTAAGGACCTCCTGAC
TGCTGCAGAAGTACTAGAAAAAGCCAGGAAGGCTTTGAGGAGACCACAGCTTTGACCGAGAATCAGGTA
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AAAGATTTGGTTTTGGTTTTCTTTGTGGCGAGCTTATCTAGAAAAGAGAAGCCCAAAGCCGAGTACCACAG
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GATGTGGAACATGCGCTAATCAAAAGATTAACCTGTACTGACTGTTGACAACCTAACCAAGCACACTG
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 AGTCTTTGATGGTGAAGCCCAACCGCCGTATCCGGAACAATGCCGTGATAAACTAGAAGCAGGAAGCAGC
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 TTGTTTCAACTAACCCAGCTATAAATGTC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR221285 protein sequence
 Red=Cloning site Green=Tags(s)

MARPVQLAPGSLALVLSPREAGQAAGEPGGRALFRAFRRANARCFWNARLARAASRLAFLGWLRRGVLLV
 RAPQPCVQVLRDAWRRRALRPPRGFRITAVGDVFPVQMSPIAQCRFVPLAEVLCCAIADMNAAQVMVTQQ
 SLLLEHLIKHYPGIAVPSPDILYSTLGALIQERKIYHTGEGYFIVTPSTYFITNTPMQGNKSALLSNEGCS
 GPTSGTYLVSVDCCAEPTQENEALFSLCPSCQCYPDTSMDKDLLTAAEVTRKSQEGLEETTALTENQV
 VSASEDTHICVNPKPLPYTKDKGRFGFGLWRSLSRKEKPKAEYHSFSAQFPPEEWPVRDEDSSTKIPR
 DVEHALIKRINPVLTVDNLTKHTALMQYEEQKKYNSQGTSMIDLTRHKDSKEVIGKRQGFSAKSRRR
 GSSHKGRHKARSQSELEPGNPGQEKEKQPKVPAAPRTKSPSEVHHLQGRNPVAVLGSLLIYKKQIN
 NPFQGMHLRKHSVSKGHAVQKTHGLKPTCVGPEEKPFWSAGSSDPGSGVFDGEAQQPPYEQCRDKLEAGST
 QVAKAPVHPVSDDFRGGPGNYPPRRVLPGPSRCCSFRESMLRPGVYHEENKDLPEVLRKSWSTCDMFLGT
 KEKKQALPAQRCSLDPDSSSVHAEDKTVDKILHQFQNLGLLDCPAGANRLRTHREQDGNSEELSRKALQI
 PEAEIVNMENEGLSDSEQDQVALSHSDPGAGDDGGCSSLLEDDDFSETDDFCPSLPGHTQHSFAGGGTW
 NHLGTPAMTGKSLTDCNSKAHRELLAIERNPWYKATGLFSNAGESPNPDLSDNPGQNSRIPWGFNYEGE
 PTVAHVQTPAAAAGRSLACSTVRTTSFPVEILQESPGDRGKSPIVWRQSLPSQEMKEHFTDKLQLVKTS
 HGPVSAQEPQGEHLEGTENYSMTGDSGIDSPRTQSLVSTNSAILDGFKRRQHFLPNREGVQKSQNLASNS
 LFQLTPAINV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001033260

ORF Size: 2973 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001033260.2](#)

RefSeq Size: 3102 bp

RefSeq ORF: 2973 bp

Locus ID: 216021

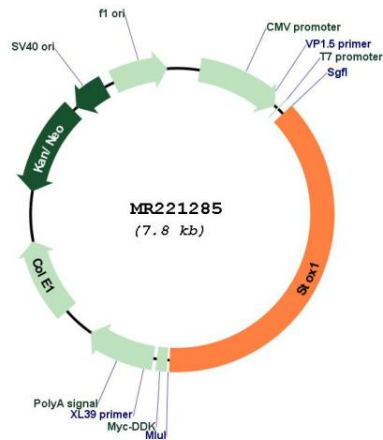
UniProt ID: [B2RQL2](#)

Cytogenetics: 10 B4

MW: 108.9 kDa

Gene Summary: Involved in regulating the levels of reactive oxidative species and reactive nitrogen species and in mitochondrial homeostasis in the placenta (By similarity). Required for regulation of inner ear epithelial cell proliferation via the AKT signaling pathway (PubMed:25677106). Involved in cell cycle regulation by binding to the CCNB1 promoter, up-regulating its expression and promoting mitotic entry (By similarity). Induces phosphorylation of MAPT/tau (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR221285