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Product datasheet for MC226998

Fst (NM_001301375) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fst (NM_001301375) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Fst
Synonyms:	AL033346; D2Mgi5; FS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC226998 representing NM_001301375 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGTCTGCGCCAGGCACCAGCCCGGCGGGCTCTGCCTCCTGCTGCTGCTACTCTGCCAGTTCATGGAGG ACCGCAGCGCCCAGGCTGGGAATTGCTGGCTCCGCCAAGCAAAGAACGGCCGCTGCCAGGTCCTGTATAA GACAGAACTGAGCAAGGAAGAGTGTTGCAGCACCGGCCGGCTGAGCACCTCATGGACCGAGGAGGATGTG AACGACAATACTCTCTTCAAGTGGATGATTTTCAACGGGGGCGCCCCCAACTGCATCCCTTGTAAAGAAA CGTGTGAGAACGTGGACTGCGGACCTGGGAAAAAATGTCGAATGAACAAGAAGAATAAACCCCGCTGCGT CTGTGCCCCAGACTGTTCCAACATCACCTGGAAGGGCCCAGTGTGTGGGCTGGATGGGAAAACCTACCGC AACGAATGTGCACTCCTCAAGGCCAGATGCAAAGAGCAGCCGGAACTAGAAGTACAGTACCAGGGCAAAT GTAAAAAGACTTGTAGGGATGTTTTTTGTCCAGGCAGCTCCACTTGTGTGGTGGATCAGACCAATAATGC CTACTGTGTGACCTGTAATCGGATTTGCCCAGAGCCCTCCTCTTCTGAACAGTACCTTTGTGGAAATGAT GGAGTGACTTACTCCAGCGCCTGCCACCTGAGAAAGGCCACCTGCTTGCTGGGCAGATCCATTGGATTAG CCTATGAGGGAAAGTGTATCAAAGCAAAGTCCTGTGAAGATATCCAGTGTGGCGGCGGGAAAAAATGCCT ATGGGATTCCAAGGTTGGCAGAGGTCGCTGCTCTCTCTGCGATGAGCTGTGTCCTGACAGTAAGTCGGAT GAGCCGGTCTGTGCCAGTGACAATGCCACATACGCCAGCGAGTGTGCCATGAAGGAAGCTGCCTGCTCTT CTGGCGTGCTTCTTGAAGTGAAGCATTCTGGATCTTGCAACTGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Restriction Sites:	SgfI-MluI
ACCN:	NM_001301375

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Insert Size:	954 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001301375.1, NP_001288304.1
RefSeq Size:	2875 bp
RefSeq ORF:	954 bp
Locus ID:	14313
UniProt ID:	P47931
Cytogenetics:	13 D2.2

Gene Summary:

The protein encoded by this gene binds to and negatively regulates activin, as well as other members of the transforming growth factor beta family, and acts to prevent uncontrolled cellular proliferation. This protein also contains a heparin-binding sequence. It is expressed in many of the tissues in which activin is synthesized and is thought to clear activin from the circulation by attachment to the cell surface. Alternative splicing results in multiple transcript variants that encode multiple protein isoforms, including FST315 and FST288, that differ at their C-terminus. Another isoform, FST303 is thought to be produced by proteolytic cleavage of FST315. These isoforms differ in their localization and in their ability to bind heparin. While FST315 is a circulating protein, FST288 is tissue-bound, and FST303 is gonad-specific. While deletion of all isoforms results in embryonic lethality, expression of just FST288 is sufficient for embryonic development, but the resultant mice have fertility defects. [provided by RefSeq, Aug 2014]
Transcript Variant: This variant (3) uses an alternate splice site in the 3' coding region, which results in a frameshift, compared to variant 1. It encodes FST288 (PMID:20032047), which has a shorter C-terminus, compared to FST315.