

Product datasheet for MR229209

Fst (NM 001301375) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Fst (NM_001301375) Mouse Tagged ORF Clone

Tag: Myc-DDK

Symbol: Fst

Synonyms: AL033346; D2Mgi5; FS

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >MR229209 representing NM_001301375
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR229209 representing NM_001301375

Red=Cloning site Green=Tags(s)

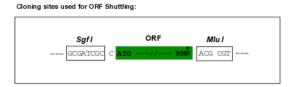
MVCARHQPGGLCLLLLLLCQFMEDRSAQAGNCWLRQAKNGRCQVLYKTELSKEECCSTGRLSTSWTEEDV NDNTLFKWMIFNGGAPNCIPCKETCENVDCGPGKKCRMNKKNKPRCVCAPDCSNITWKGPVCGLDGKTYR NECALLKARCKEQPELEVQYQGKCKKTCRDVFCPGSSTCVVDQTNNAYCVTCNRICPEPSSSEQYLCGND GVTYSSACHLRKATCLLGRSIGLAYEGKCIKAKSCEDIQCGGGKKCLWDSKVGRGRCSLCDELCPDSKSD EPVCASDNATYASECAMKEAACSSGVLLEVKHSGSCN

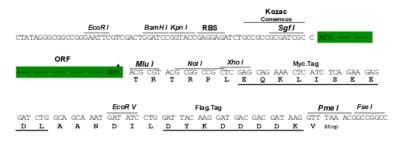
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

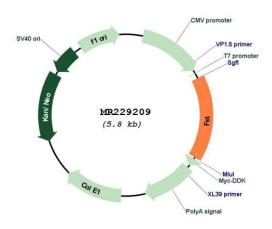
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001301375

ORF Size: 951 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: <u>NM 001301375.1</u>, <u>NP 001288304.1</u>

RefSeq Size: 2875 bp
RefSeq ORF: 954 bp
Locus ID: 14313
UniProt ID: P47931
Cytogenetics: 13 D2.2

MW: 35.1 kDa

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]