

## **Product datasheet for MC227169**

## Fst (NM\_001301373) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Fst (NM\_001301373) Mouse Untagged Clone

Tag: Tag Free

Symbol: Fst

Synonyms: AL033346; D2Mgi5; FS

Vector: pCMV6-Entry (PS100001)

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

Cell Selection: Neomycin

Fully Sequenced ORF: >MC227169 representing NM\_001301373

Red=Cloning site Blue=ORF Orange=Stop codon

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCC}$ 

GCCGCGATCGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM 001301373



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**Insert Size:** 1035 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.

RefSeq: <u>NM 001301373.1</u>, <u>NP 001288302.1</u>

 RefSeq Size:
 2575 bp

 RefSeq ORF:
 1035 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 (1) encodes the longest isoform, FST315 (PMID:17932109).