

Product datasheet for MR206701L3

Fbxo5 (NM_025995) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Fbxo5 (NM_025995) Mouse Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: Fbxo5

Synonyms: 2510044l10Rik; C85305; Emi1; Fbxo31

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

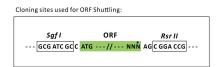
E. coli Selection: Chloramphenicol (34 ug/mL)

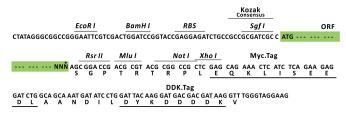
ORF Nucleotide The ORF insert of this clone is exactly the same as(MR206701).

Sequence:

Restriction Sites: Sgfl-Rsrll

Cloning Scheme:





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

ACCN: NM_025995

ORF Size: 1266 bp



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Fbxo5 (NM_025995) Mouse Tagged Lenti ORF Clone - MR206701L3

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 025995.2</u>, <u>NP 080271.2</u>

RefSeq Size: 1820 bp
RefSeq ORF: 1266 bp
Locus ID: 67141
UniProt ID: Q7TSG3
Cytogenetics: 10 A1

Gene Summary: Regulator of APC activity during mitotic and meiotic cell cycle (PubMed:17190794,

PubMed:15526037, PubMed:16809773). During mitotic cell cycle plays a role as both substrate and inhibitor of APC-FZR1 complex (PubMed:16809773). During G1 phase, plays a role as substrate of APC-FZR1 complex E3 ligase. Then switches as an inhibitor of APC-FZR1 complex during S and G2 leading to cell-cycle commitment. As APC inhibitor, prevents the degradation of APC substrates at multiple levels: by interacting with APC and blocking access of APC substrates to the D-box co-receptor, formed by FZR1 and ANAPC10; by suppressing ubiquitin ligation and chain elongation by APC by preventing the UBE2C and UBE2S activities. Plays a role in genome integrity preservation by coordinating DNA replication with mitosis through APC inhibition in interphase to stabilize CCNA2 and GMNN in order to promote mitosis and prevent rereplication and DNA damage-induced cellular senescence (By similarity). During oocyte maturation, plays a role in meiosis through inactivation of APC-FZR1 complex. Inhibits APC through RPS6KA2 interaction that increases FBXO5 affiniy for CDC20

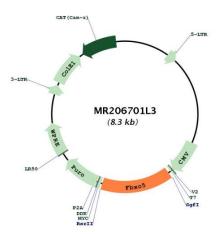
leading to the metaphase arrest of the second meiotic division before fertilization

(PubMed:15526037). Controls entry into the first meiotic division through inactivation of APC-FZR1 complex (PubMed:17190794). Promotes migration and osteogenic differentiation of

mesenchymal stem cells (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR206701L3