

#### OriGene Technologies, Inc.

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# Product datasheet for MR206738L4V

## Fbxl2 (NM\_178624) Mouse Tagged ORF Clone Lentiviral Particle

### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Fbxl2 (NM_178624) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Fbxl2
Synonyms:	2810423A21Rik; Fbl3
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_178624
ORF Size:	1272 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR206738).
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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<u>NM 178624.3, NP 848739.1</u>
RefSeq Size:	3203 bp
RefSeq ORF:	1272 bp
Locus ID:	72179
UniProt ID:	<u>Q8BH16</u>
Cytogenetics:	9 F3



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Gene Summary: Calcium-activated substrate recognition component of the SCF (SKP1-cullin-F-box protein) E3 ubiquitin-protein ligase complex, SCF(FBXL2), which mediates the ubiquitination and subsequent proteasomal degradation of target proteins. Unlike many F-box proteins, FBXL2 does not seem to target phosphodegron within its substrates but rather calmodulin-binding motifs and is thereby antagonized by calmodulin. This is the case for the cyclins CCND2 and CCND3 which polyubiquitination and subsequent degradation are inhibited by calmodulin. Through CCND2 and CCND3 degradation induces cell-cycle arrest in G(0). SCF(FBXL2) also mediates PIK3R2 ubiquitination and proteasomal degradation thereby regulating phosphatidylinositol 3-kinase signaling and autophagy (By similarity). PCYT1A monoubiquitination by SCF(FBXL2) and subsequent degradation regulates synthesis of phosphatidylcholine, which is utilized for formation of membranes and of pulmonary surfactant (PubMed:21343341).[UniProtKB/Swiss-Prot Function]

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