

Product datasheet for RG235577

OriGene Technologies, Inc.

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FKBP12 (FKBP1A) (NM_001199786) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: FKBP12 (FKBP1A) (NM_001199786) Human Tagged ORF Clone

Tag: TurboGFP
Symbol: FKBP1A

Synonyms: FKBP-1A; FKBP-12; FKBP1; FKBP12; PKC12; PKC12; PPIASE

Mammalian Cell Neo

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG235577 representing NM_001199786.
Sequence: Blue=ORF Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

CCAGACATGTGCACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

Protein Sequence: >Peptide sequence encoded by RG235577

Blue=ORF Red=Cloning site Green=Tag(s)

MGVQVETISPGDGRTFPKRGQTCVVHYTDECGSESQTDYISRLCLWCHWAPRHHPTTCHSRLRCGASKT

 ${\sf GMTGMASSLSSLFLDLPWRDLVPPDMCT}$

TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVDSHMHFKSAIHPSILQNGGPMFA

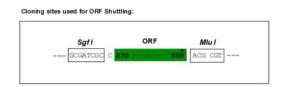
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

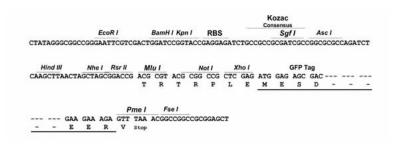
Restriction Sites: Sgfl-Mlul



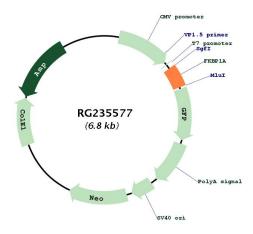


Cloning Scheme:





Plasmid Map:



ACCN: NM_001199786

ORF Size: 291 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



FKBP12 (FKBP1A) (NM_001199786) Human Tagged ORF Clone - RG235577

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).

RefSeq: <u>NM 001199786.1</u>, <u>NP 001186715.1</u>

RefSeq Size: 1530 bp
RefSeq ORF: 294 bp
Locus ID: 2280

Cytogenetics: 20p13

Protein Families: Druggable Genome

MW: 11.3 kDa

Gene Summary: The protein encoded by this gene is a member of the immunophilin protein family, which play

a role in immunoregulation and basic cellular processes involving protein folding and trafficking. The protein is a cis-trans prolyl isomerase that binds the immunosuppressants FK506 and rapamycin. It interacts with several intracellular signal transduction proteins including type I TGF-beta receptor. It also interacts with multiple intracellular calcium release channels, and coordinates multi-protein complex formation of the tetrameric skeletal muscle ryanodine receptor. In mouse, deletion of this homologous gene causes congenital heart disorder known as noncompaction of left ventricular myocardium. Multiple alternatively spliced variants, encoding the same protein, have been identified. The human genome contains five pseudogenes related to this gene, at least one of which is transcribed. [provided

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by RefSeq, Sep 2008]