

Product datasheet for RC200662

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OriGene Technologies, Inc.

FKBP12 (FKBP1A) (NM_054014) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: FKBP12 (FKBP1A) (NM_054014) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: FKBP12

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

Mammalian Cell Neo

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC200662 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGAGTGCAGGTGGAAACCATCTCCCCAGGAGACCGGGCGCACCTTCCCCAAGCGCGGCCAGACCTGCG TGGTGCACTACACCGGGATGCTTGAAGATGGAAAGAAATTTGATTCCTCCCGGGACAGAAACAAGCCCTT TAAGTTTATGCTAGGCAAGCAGGAGGTGATCCGAGGCTGGGAAGAAGGGGGTTGCCCAGATGAGTGTGGGT CAGAGAGCCAAACTGACTATATCTCCAGATTATGCCTATGGTGCCACTGGGCACCCAGGCATCATCCCAC

CACATGCCACTCTCGTCTTCGATGTGGAGCTTCTAAAACTGGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200662 protein sequence

Red=Cloning site Green=Tags(s)

MGVQVETISPGDGRTFPKRGQTCVVHYTGMLEDGKKFDSSRDRNKPFKFMLGKQEVIRGWEEGVAQMSVG

QRAKLTISPDYAYGATGHPGIIPPHATLVFDVELLKLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

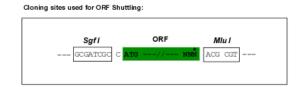
Chromatograms: https://cdn.origene.com/chromatograms/mk6392 e11.zip

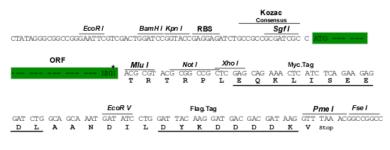
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





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

ACCN: NM_054014

ORF Size: 324 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: NM 054014.3

RefSeq Size: 901 bp RefSeq ORF: 327 bp Locus ID: 2280 UniProt ID: P62942

Cytogenetics: 20p13

Domains: FKBP

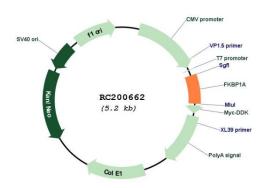
Protein Families: Druggable Genome

MW: 12 kDa

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

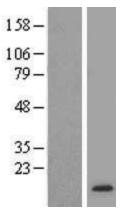
a role in immunoregulation and basic cellular processes involving protein folding and trafficking. The protein is a cis-trans prolyl isomerase that binds the immunosuppressants FK506 and rapamycin. It interacts with several intracellular signal transduction proteins including type I TGF-beta receptor. 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 by RefSeq, Sep 2008]

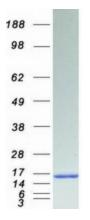
Product images:



Circular map for RC200662







Western blot validation of overexpression lysate (Cat# [LY409302]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200662 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified FKBP1A protein (Cat# [TP300662]). The protein was produced from HEK293T cells transfected with FKBP1A cDNA clone (Cat# RC200662) using MegaTran 2.0 (Cat# [TT210002]).