

Product datasheet for **RG200662**

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: TurboGFP
Symbol: FKBP12
Synonyms: FKBP-1A; FKBP-12; FKBP1; FKBP12; PKC12; PKC12; PPIASE
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG200662 representing NM_054014
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGAGTGCAGGTGGAACCATCTCCCCAGGAGACGGGCGCACCTTCCCCAAGCGCGGCCAGACCTGCG
TGGTGCACTACACCGGGATGCTTGAAGATGGAAGAAATTTGATTCCTCCCGGACAGAAACAAGCCCTT
TAAGTTTATGCTAGGCAAGCAGGAGGTGATCCGAGGCTGGGAAGAAGGGTTGCCAGATGAGTGTGGGT
CAGAGAGCCAACTGACTATATCTCCAGATTATGCCTATGGTGCCACTGGGCACCCAGGCATCATCCAC
CACATGCCACTCTCGTCTTCGATGTGGAGCTTCTAAACTGGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG200662 representing NM_054014
Red=Cloning site Green=Tags(s)
 MGVQVETISPGDGRTPFKRGQTCVVHYTGMLLEDGKKFDSSDRNKPFFKMLGKQEVIRGWEEGVAQMSVG
 QRAKLTISPDYAYGATGHPGIIPPHATLVFDVELLKE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI


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Cloning Scheme:


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.

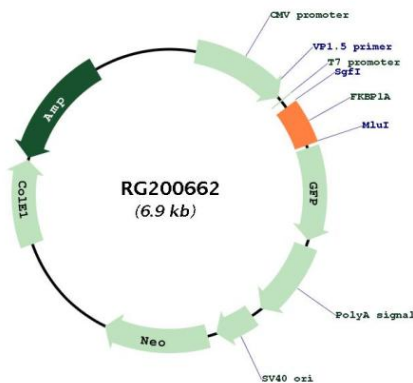
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_054014.3](#)

RefSeq Size: 810 bp
 RefSeq ORF: 327 bp
 Locus ID: 2280
 UniProt ID: [P62942](#)
 Cytogenetics: 20p13
 Domains: FKBP
 Protein Families: Druggable Genome

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 RG200662