

## Product datasheet for **RC201237**

### **FKBP12 (FKBP1A) (NM\_000801) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** FKBP12 (FKBP1A) (NM\_000801) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** FKBP12  
**Synonyms:** FKBP-1A; FKBP-12; FKBP1; FKBP12; PKC12; PKC12; PPIASE  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC201237 ORF sequence  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGAGTGCAGGTGAAACCATCTCCCCAGGAGACGGGCGCACCTTCCCCAAGCGCGGCCAGACCTGCG  
TGGTGCCTACACCGGGATGCTTGAAGATGAAAGAAATTTGATTCCTCCCGGACAGAAACAAGCCCTT  
TAAGTTTATGCTAGGCAAGCAGGAGGTGATCCGAGGCTGGGAAGAAGGGTTGCCAGATGAGTGTGGGT  
CAGAGAGCCAAACTGACTATATCTCCAGATTATGCCTATGGTCCACTGGCACCCAGGCATCATCCAC  
CACATGCCACTCTCGTCTCGATGTGGAGCTTCTAAAAGTGGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC201237 protein sequence  
**Red=Cloning site Green=Tags(s)**  
MGVQVETISPGDGRTPFKRGQTCVVHYTGMLLEDGKKFDSSRDNRNPKFKFMLGKQEVIRGWEEGVAQMSVG  
QRAKLTISPDYAYGATGHPGIIPPHATLVFDVELLKLE

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6083\\_d06.zip](https://cdn.origene.com/chromatograms/mk6083_d06.zip)

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_000801

**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\\_000801.5](#)

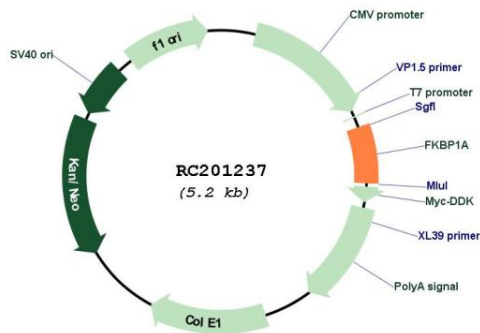
**RefSeq Size:** 1643 bp

**RefSeq ORF:** 327 bp

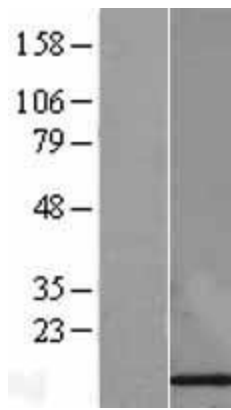
**Locus ID:** 2280  
**UniProt ID:** [P62942](#)  
**Cytogenetics:** 20p13  
**Domains:** FKBP  
**Protein Families:** Druggable Genome  
**MW:** 12 kDa

**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]

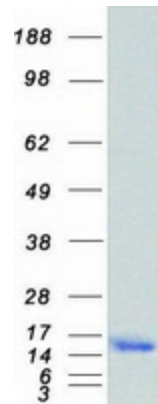
### Product images:



Circular map for RC201237



Western blot validation of overexpression lysate (Cat# [LY400279]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201237 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FKBP1A protein (Cat# [TP301237]). The protein was produced from HEK293T cells transfected with FKBP1A cDNA clone (Cat# RC201237) using MegaTran 2.0 (Cat# [TT210002]).