

## Product datasheet for **RC210608**

### **FKBP51 (FKBP5) (NM\_004117) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FKBP51 (FKBP5) (NM_004117) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FKBP51
Synonyms:	AIG6; FKBP51; FKBP54; P54; PPIase; Ptg-10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC210608 representing NM\_004117  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACTACTGATGAAGGTGCCAAGAACAATGAAGAAAGCCACAGCCACTGTTGCTGAGCAGGGAGAGG  
 ATATTACCTCCAAAAAGACAGGGGAGTATTAAGATTGTCAAAAGAGTGGGGAATGGTGAGGAAACGCC  
 GATGATTGGAGACAAAGTTTATGTCCATTACAAAGGAAAATTGTCAAATGGAAAGAAGTTTGATTCCAGT  
 CATGATAGAAATGAACATTTGTCTTTAGTCTTGGCAAAGGCCAAGTCATCAAGGCATGGGACATTTGGG  
 TGGCTACCATGAAGAAAGGAGAGATATGCCATTTACTGTGCAAACCAGAAATATGCATATGGCTCGGCTGG  
 CAGTCTCCCTAAAATTCCTCGAATGCAACTCTCTTTTTGAGATTGAGCTCCTTGATCTCAAAGGAGAG  
 GATTTATTTGAAGATGGAGGCATTATCCGGAGAACCAACGAAAGGAGAGGGATATTCAAATCCAAACG  
 AAGGAGCAACAGTAGAAATCCACCTGGAAGGCCGCTGTGGTGAAGGATGTTTGACTGCAGAGATGTGGC  
 ATTCACTGTGGGCGAAGGAGAAGACCACGACATCCAATTGGAATTGACAAAGCTCTGGAGAAAATGCAG  
 CGGAAGAACAATGTATTTTATATCTTGGACCAAGATATGGTTTTGGAGAGGCAGGGAAGCCTAAATTTG  
 GCATTGAACCTAATGCTGAGCTTATATATGAAGTTACACTTAAGAGCTTCGAAAAGGCCAAAGAATCCTG  
 GGAGATGGATACCAAGAAAAATTTGGAGCAGGCTGCCATTGTCAAAGAGAAGGGAACCGTATACTTCAAG  
 GGAGGCAATACATGCAGGCGGTGATTCAGTATGGGAAGATAGTGTCTGGTTAGAGATGGAATATGGTT  
 TATCAGAAAAGGAATCGAAAGCTTCTGAATCATTTCTCCTTGCTGCCTTTCTGAACCTGGCCATGTGCTA  
 CCTGAAGCTTAGAGAATACCCAAGCTGTTGAATGCTGTGACAAGGCCCTTGGACTGGACAGTGCCAAAT  
 GAGAAAAGCTTGTATAGGAGGGGTGAAGCCAGCTGCTCATGAACGAGTTTGAGTCAGCCAAGGGTGACT  
 TTGAGAAAAGTGTGAAGTAAACCCCAAGATAAGGCTGCAAGACTGCAGATCTCCATGTGCCAGAAAAA  
 GGCCAAGGAGCACACGAGCGGGACCGCAGGATATACGCCAACATGTTCAAGAAGTTTGCAGAGCAGGAT  
 GCCAAGGAAGAGGCCAATAAAGCAATGGCAAGAAGACTTCAGAAGGGGTCACTAATGAAAAAGGAACAG  
 ACAGTCAAGCAATGGAAGAAGAGAAACCTGAGGGCCACGTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC210608 representing NM\_004117  
 Red=Cloning site Green=Tags(s)

MTTDEGAKNNEESPTATVAEQGEDITSKKDRGVLIKVKRVNGEETPMIGDKVYVHYKGLSNGKKFDSS  
 HDRNEPFVFSLKGQVIKAWDIGVATMKGGEICHLLCKPEYAYGSAGSLPKIPSNATLFFEIELLDLKG  
 DLFEDGGIIRRTKRKGEYSNPNEGATVEIHLEGRCGGRMFDCRDVAFTVGEGEDHDIPIGIDKALEKMQ  
 REEQCILYLGPYGFGEAGKPKFGIEPNAELIYEVTLKSFEEKAKESWEMDTKEKLEQAAIVKEKGTVYFK  
 GGYMQAVIQYKIVSWLEMEYGLSEKESKASESFLLAFLNLAMCYLKLREYTKAVECCDKALGLDSAN  
 EKGLYRRGEAQLLMNEFESAKGDFEKVLEVNPNQKAARLQISMCQKKAKEHNERDRRIYANMFKKFAEQD  
 AKEEANKAMGKKTSEGVNTEKGTDSQAMEEEKPEGHV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2488\\_e04.zip](https://cdn.origene.com/chromatograms/mg2488_e04.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_004117

**ORF Size:** 1371 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\\_004117.4](#)

**RefSeq Size:** 3781 bp

**RefSeq ORF:** 1374 bp

**Locus ID:** 2289

**UniProt ID:** [Q13451](#)

**Cytogenetics:** 6p21.31

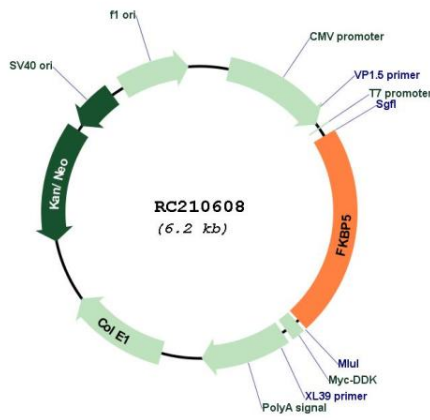
**Domains:** FKBP, TPR

**Protein Families:** Druggable Genome

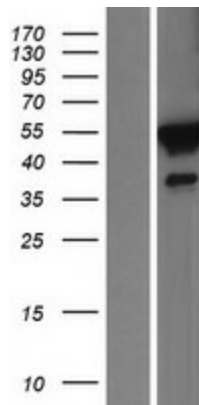
**MW:** 51 kDa

**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. This encoded protein is a cis-trans prolyl isomerase that binds to the immunosuppressants FK506 and rapamycin. It is thought to mediate calcineurin inhibition. It also interacts functionally with mature hetero-oligomeric progesterone receptor complexes along with the 90 kDa heat shock protein and P23 protein. This gene has been found to have multiple polyadenylation sites. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2009]

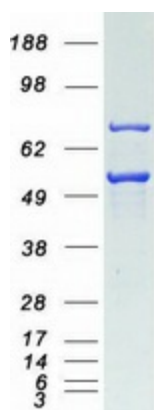
**Product images:**



Circular map for RC210608



Western blot validation of overexpression lysate (Cat# [LY429003]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227040] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FKBP5 protein (Cat# [TP310608]). The protein was produced from HEK293T cells transfected with FKBP5 cDNA clone (Cat# RC210608) using MegaTran 2.0 (Cat# [TT210002]).