

## Product datasheet for **RG200713**

### **FKBP52 (FKBP4) (NM\_002014) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FKBP52 (FKBP4) (NM_002014) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FKBP52
Synonyms:	FKBP51; FKBP52; FKBP59; HBI; Hsp56; p52; PPlase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG200713 representing NM\_002014  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACAGCCGAGGAGATGAAGGCGACCGAGAGCGGGCGCAGTCGGCGCCGCTGCCCATGGAGGGAGTGG  
 ACATCAGCCCCAACAGGACGAAGGCGTCTGAAGGTCATCAAGAGAGAGGGCACAGGTACAGAGATGCC  
 CATGATTGGGGACCGAGTCTTTGTCCACTACACTGGCTGGCTATTAGATGGCACAAAGTTTGACTCCAGT  
 CTGGATCGCAAGGACAAATTCTCCTTTGACCTGGGAAAAGGGGAGGTATCAAGGCTTGGGACATTGCCA  
 TAGCCACCATGAAGTGGGGGAGGTGTCCACATCACCTGCAAACCAGAAATATGCCTACGGTTCAGCAGG  
 CAGTCTCCAAAGATTCCCCCAATGCCACGCTTGTATTTGAGGTGGAGTTGTTTGAAGGAGAA  
 GATCTGACGGAAGAGGAAGATGGCGGAATCATTGCAGAATACAGACTCGCGGTGAAGGCTATGCTAAGC  
 CCAATGAGGGTGTATCGTGGAGTTGCACTGGAAGGTTACTACAAGGACAAGCTCTTTGACCAGCGGGA  
 GCTCCGCTTTGAGATTGGCGAGGGGAGAACCTGGATCTGCCTTATGGTCTGGAGAGGGCCATTCAGCGC  
 ATGGAGAAAGGAGAACATTCCATCGTGTACCTCAAGCCAGCTATGCTTTTGGCAGTGTTGGGAAGGAAA  
 AGTTCCAAATCCCACCAATGCTGAGCTGAAATATGAATTACACCTCAAGAGTTTGGAAAAGGCCAAGGA  
 GTCTTGGGAGATGAATTCAGAAGAGAAGCTGGAACAGAGCACCATAGTAAAAGAGCGGGGCACTGTGTAC  
 TTCAAGGAAGGTAATACAAGCAAGCTTTACTACAGTATAAGAAGATCGTGTCTTGGCTGGAATATGAGT  
 CTAGTTTTTCCAATGAGGAAGCACAGAAAGCACAGGCCCTTCGACTGGCCTCTCACCTCAACCTGGCCAT  
 GTGTCACTGAACTACAGGCCTTCTCTGCTGCCATTGAAAGCTGTAACAAGGCCCTAGAAGTGGACAGC  
 AACACGAGAAGGGCCTTCCGCCGGGAGAGGCCACCTGGCCGTGAATGACTTTGAACTGGCACGGG  
 CTGATTTCCAGAAGGTCCTGCAGCTCTACCCCAACAACAAGCCGCAAGACCCAGCTGGCTGTGTCCA  
 GCAGCGGATCCGAAGGCAGCTTGCCTGGGAGAAGAAGCTCTATGCCAATATGTTTGGAGAGGCTGGCTGAG  
 GAGGAGAACAAAGGCCAAGGCAGAGGCTTCTCAGGAGACCATCCCACTGACACAGAGATGAAGGAGGAGC  
 AGAAGAGCAACACGGCAGGGAGCCAGTCTCAGGTGGAGACAGAAGCA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG200713 representing NM\_002014  
 Red=Cloning site Green=Tags(s)

MTAEEMKATESGAQSAPLPMEGVDISPKQDEGLVKVIKREGTGTEMPMIGDRVVFVHYTGWLLDGTKFDSS  
 LDRKDKFSFDLKGGEVIKAWDIAIATMKVGEVCHITCKPEYAYGSAGSPPKIPPNATLVFEVLEFEFKGE  
 DLTEEDGGIIRRIQTRGEGYAKPNEGATIVEVALEGGYKDKLFDQRELRFEGEGENLDLPYGLERAIQR  
 MEKGEHSIVYLKPSYAFGSVKGKFKQIPPNALKYELHLKSFKAKESWEMNSEEKLEQSTIVKERGTIVY  
 FKEGKYKQALLQYKKIVSWLEYESSFSNEEAQKAQALRLASHLNLAMCHLKLQAFSAAIESCNALELDS  
 NNEKGLFRRGEAHLAVNDFELARADFQKVLQLYPNNKAQKTLAVCQQRIRRLAREKKLYANMFERLAE  
 EENKAKAEASSGDHPTDTEMKEEQSNTAGSQQVETEA

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_002014

**ORF Size:** 1377 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\\_002014.4](#)

**RefSeq Size:** 2251 bp

**RefSeq ORF:** 1380 bp

**Locus ID:** 2288

**UniProt ID:** [Q02790](#)

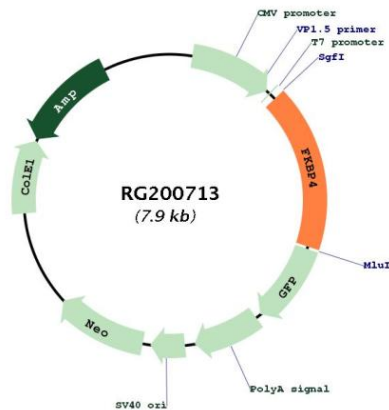
**Cytogenetics:** 12p13.33

**Domains:** FKBP, TPR

**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. This encoded protein is a cis-trans prolyl isomerase that binds to the immunosuppressants FK506 and rapamycin. It has high structural and functional similarity to FK506-binding protein 1A (FKBP1A), but unlike FKBP1A, this protein does not have immunosuppressant activity when complexed with FK506. It interacts with interferon regulatory factor-4 and plays an important role in immunoregulatory gene expression in B and T lymphocytes. This encoded protein is known to associate with phytanoyl-CoA alpha-hydroxylase. It can also associate with two heat shock proteins (hsp90 and hsp70) and thus may play a role in the intracellular trafficking of hetero-oligomeric forms of the steroid hormone receptors. This protein correlates strongly with adeno-associated virus type 2 vectors (AAV) resulting in a significant increase in AAV-mediated transgene expression in human cell lines. Thus this encoded protein is thought to have important implications for the optimal use of AAV vectors in human gene therapy. The human genome contains several non-transcribed pseudogenes similar to this gene. [provided by RefSeq, Sep 2008]

**Product images:**



Circular map for RG200713