

Product datasheet for **SC109241**

FKBP12 (FKBP1A) (NM_000801) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FKBP12 (FKBP1A) (NM_000801) Human Untagged Clone
Tag:	Tag Free
Symbol:	FKBP12
Synonyms:	FKBP-1A; FKBP-12; FKBP1; FKBP12; PKC12; PKC12; PPIASE
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109241 sequence for NM_000801 edited (data generated by NextGen Sequencing) ATGGGAGTGCAGGTGAAACCATCTCCCCAGGAGACGGGCGCACCTTCCCCAAGCGCGGC CAGACCTGCGTGGTGCACTACACCGGGATGCTTGAAGATGGAAAGAAATTTGATTCTCC CGGGACAGAAACAAGCCCTTTAAGTTTATGCTAGGCAAGCAGGAGGTGATCCGAGGCTGG GAAGAAGGGGTTGCCAGATGAGTGTGGGTGAGAGGCCAAACTGACTATATCTCCAGAT TATGCCTATGGTGCCACTGGGCACCCAGGCATCATCCCACCACATGCCACTCTCGTCTTC GATGTGGAGCTTCTAAAACCTGGAATGA Clone variation with respect to NM_000801.4



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000801 unedited
 NGGTGCAGATTTGTATACGACTCACTATAGGCGGCNCGCGATTCCGGCACGAGGTGCGCGT
 GCGCAGGCGACGCGCCNGAGTACTAGGCAGAGCCGTGGAACCGCCGCGCAGGTGCGTGTG
 GTCCACGCCGCCCGTCGCGCCGCCCGCCGCTCAGCGTCCGCCGCCGCGCATGGGAGTGCA
 GGTGGAACCATCTCCCCAGGAGACGGGCGCACCTTCCCCAAGCGCGGCCAGACCTGCGT
 GGTGCACCTACACCGGGATGCTTGAAGATGAAAAGAAATTTGATTCTCCCGGGACAGAAA
 CAAGCCCTTTAAGTTTATGCTAGGCAAGCAGGAGGTGATCCGAGGCTGGGAAGAAGGGGT
 TGCCAGATGAGTGTGGTCCAGAGAGCCAACTGACTATATCTCCAGATTATGCCTATGG
 TGCCACTGGGCACCCAGGCATCATCCACCACATGCCACTCTCGTCTTCGATGTGGAGCT
 TCTAAACTGGAATGACAGGAATGGCCTCCTCCCTTAGCTCCCTGTTCTTGGATCTGCCA
 TGGAGGGATCTGGTGCCTCCAGACATGTGCACATGAGTCCATATGGAGCTTTTCTGATG
 TTCCACTCCACTTTGTATAGACATCTGCCCTGACTGAATGTGTTCTGCACTCAGCTTTG
 CTTCCGACACCTCTGTTTCTCTTTCCCTTTCTCCTCGTATGTGTGTTTACCTAACTAT
 ATGCCATAAACCTCAAGTACTCATTTTATTTTGTGTTTTCATTNTGGGGTGAAGATTCGT
 TTTAGTCTTTTTGATTAGTTTCCCATTAAGTACATGGTCAAGTATTACCAGCACAAAGT
 TTAGGCTAACTACAATAGCATTGGTGTGGGGGGGGGGGTTCCCAAAACCTCTAAT
 GTAATATTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000801 unedited
 TTTTTTTTTTTTTTTTTGAGAAAACCGGCATAAAGCACTTTTATTGCAATAATAAACTT
 GAGACTCATAAATGGTGTGGGGGAAGGGTGCAGCAACGATTTCTACCAATCACTACA
 CAGGACAGCAAAGGGGTGAGAAGGGCTGAGGGAGGAAAAGCCAGGAACTGAGATCAGC
 AGAGGGAGCCAAGCATCAAAAAACAGGAGATGTGAAGCTGCGATGACCAGCATCATTTT
 CTTAAGAGAACATTCAAGGATTTGTCATGATGGCTGGGCTTTCAGTGGGTGTTAAGTCTA
 CAAACAGCACCTCAATTGAACTGTCAATTAAGTTCTTAAGATTTAGGAAGTGGTGGGA
 GCTTGGAAAGTTATGAGATTACAAAATCCTGAAAGTCCATTAGAAAACACAGGATGA
 AAAAAAAAAAAGGCCACAAAGAAGGCTTCAGAGGTCCTGCTGGCCAGGGACAGATACC
 TGTAGTGTCCAGCATTGCAGTGAACATGATCTACTTTCAAAGGCAG

Restriction Sites:

NotI-NotI

ACCN:

NM_000801

Insert Size:

1630 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_000801.2](#), [NP_000792.1](#)

RefSeq Size: 1578 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]

Transcript Variant: This variant (1, also known as 12B) represents the longest transcript and encodes the longer isoform (a). Both variants 1 and 2 encode the same isoform (a).