

## Product datasheet for **SC328486**

### p53R2 (RRM2B) (NM\_001172478) Human Untagged Clone

#### Product data:

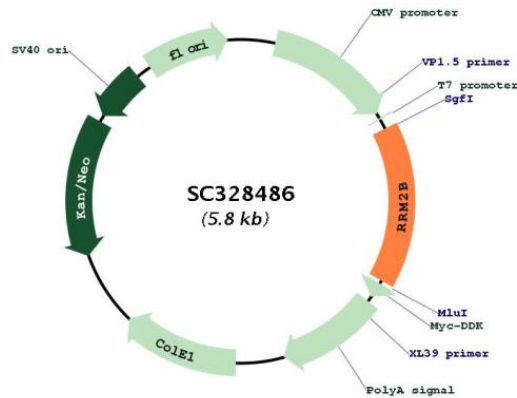
Product Type:	Expression Plasmids
Product Name:	p53R2 (RRM2B) (NM_001172478) Human Untagged Clone
Tag:	Tag Free
Symbol:	RRM2B
Synonyms:	MTDPS8A; MTDPS8B; P53R2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC328486 representing NM_001172478. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGCGACCCGAAAGGCCGGAAGCGCGGGCTGGATCAGGATGAGGTCGACTTATCAAAGGATCTC
CCTCACTGGAACAAGCTTAAAGCAGATGAGAAGTACTTCATCTCTCACATCTTAGCCTTTTTGCAGCC
AGTGATGGAATTGTAATGAAAATTTGGTGGAGCGCTTAGTCAGGAGGTGCAGGTTCCAGAGGCTCGC
TGTTTCTATGGCTTTCAAATTCATCGAGAATGTTCACTCAGAGATGTACAGTTTGCTGATAGACT
TACATCAGAGATCCCAAGAAAAGGGAATTTTTATTAATGCAATTGAAACCATGCCCTATGTTAAGAAA
AAAGCAGATTGGCCTTGCAGTGGATAGCAGATAGAAAATCTACTTTGGGAAAGAGTGGTGGCCTTT
GCTGCTGTAGAAGGAGTTTTCTTCTCAGGATCTTTGCTGCTATATTCTGGCTAAAGAAGAGAGGCTT
ATGCCAGGACTCACTTTTTCCAATGAACTCATCAGCAGAGATGAAGGACTTCACTGTGACTTTGCTTGC
CTGATGTTCCAATACTTAGTAAATAAGCCTTCAGAAGAAAGGGTCAGGGAGATCATTGTTGATGCTGTC
AAAATTGAGCAGGAGTTTTAACAGAAGCCTTGCCAGTTGGCCTCATTGGAATGAATTGCATTTGATG
AAACAGTACATTGAGTTTGTAGCTGACAGATTACTTGTGGAAGTGGATTCTCAAAGTTTTTCAGGCA
GAAAATCCTTTGATTTTATGGAAAACATTTCTTTAGAAGGAAAAACAAATTTCTTTGAGAAACGAGTT
TCAGAGTATCAGCGTTTTGCAGTTATGGCAGAAACACAGATAACGTCTTCACCTTGGATGCAGATTTT
TAA
ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



Plasmid Map:



ACCN: NM\_001172478

Insert Size: 900 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001172478.1](#)

RefSeq Size: 4776 bp

RefSeq ORF: 900 bp

<b>Locus ID:</b>	50484
<b>UniProt ID:</b>	<a href="#">Q7LG56</a>
<b>Cytogenetics:</b>	8q22.3
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Glutathione metabolism, Metabolic pathways, p53 signaling pathway, Purine metabolism, Pyrimidine metabolism
<b>MW:</b>	34.5 kDa

**Gene Summary:** This gene encodes the small subunit of a p53-inducible ribonucleotide reductase. This heterotetrameric enzyme catalyzes the conversion of ribonucleoside diphosphates to deoxyribonucleoside diphosphates. The product of this reaction is necessary for DNA synthesis. Mutations in this gene have been associated with autosomal recessive mitochondrial DNA depletion syndrome, autosomal dominant progressive external ophthalmoplegia-5, and mitochondrial neurogastrointestinal encephalopathy. Alternatively spliced transcript variants have been described.[provided by RefSeq, Feb 2010]  
Transcript Variant: This variant (3) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. This results in a shorter protein (isoform 3), compared to isoform 1.