

Product datasheet for **SC333553**

MARK1 (NM_001286129) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MARK1 (NM_001286129) Human Untagged Clone
Tag:	Tag Free
Symbol:	MARK1
Synonyms:	MARK; Par-1c; Par1c
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC333553 representing NM_001286129. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTGCTGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGGATCGCC
ATGTCGGCCCGGACGCCATTGCCGACGGTGAACGAGCGGGACACGGAAAATCATACATCTGTGGATGGA
TACTACTGAACACACATCCAGCCTACCAAGTCGAGTAGCAGACAGAACATCCCCCGGTGTAGAACTCC
ATTACGTCAGCAACAGATGAACAGCCTCACATTGGAAATTACCGTTTACAAAAACAATAGGGAAGGGA
AATTTTGCCAAAGTCAAATTGGCAAGACACGTTCTAACTGGTAGAGAGGTTGCTGTGAAAATAATAGAC
AAAACTCAGCTAAATCCTACCAGTCTACAAAAGGTATTTAATTAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001286129
Insert Size:	321 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).
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).



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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_001286129.1](#)

RefSeq Size: 2747 bp

RefSeq ORF: 321 bp

Locus ID: 4139

Cytogenetics: 1q41

Protein Families: Druggable Genome, Protein Kinase

MW: 11.9 kDa

Gene Summary: Serine/threonine-protein kinase (PubMed:23666762). Involved in cell polarity and microtubule dynamics regulation. Phosphorylates DCX, MAP2 and MAP4. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:23666762). Involved in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (5) differs in the 3' UTR and has multiple coding region differences, compared to variant 1, one of which results in a frameshift. The resulting protein (isoform 5) has a distinct C-terminus and is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.