

## Appendix 1

Zainon, R., Shamsudin, A. F., Zulkafli, Z., & Bakar, N. S. (2023). Association between SORT1/CELSR2/PSRC1 rs646776 polymorphism and statin-affected plasma lipid levels. *Biomedical Research and Therapy*, 10(12), 6110-6117. <https://doi.org/10.15419/bmrat.v10i12.853>

### Appendix 1

rs646776 ARMS PCR Primer Design

rs646776 reference sequence: fasta format

```
>gnl|dbSNP|rs646776|allelePos=501|totalLen=1001|taxid=9606|snpclass=1|alleles='A/G'|mol=Genomic|build=151
```

```
TAGGAATTCA AGACCAGCCT GATCAACATA GTGAGACCCC GCCTCTATTA AATTTAAAAA
GCATATATAC TTTTAAATAT ATATCATATA TATACACAAA AACAAAACCTT AGGCTGAGAA
GTAATGTTGC AAAGCACACA CTTGGCTTCA GTATGAGTAG CTGCTTCATT TTCCAATGGG
AAAAAAAAAA CAAAAAACAA CCCTGAGCAG TATAGTTAGG AGGCACTGAG TCACTGACCA
CCATTCAATT CCAACCAGCC TCTCAATGCA GCCCTCCCTG CTTCTTGAAT TCTGCCCCAG
AAAACATCAT CCTGTCTAGG ACTCAGCCCT GAGGGGCTGG GCTGGAAGGC TGCCTGCCCC
GTGCAGCCTC TCCCACCGTA GAAGTCCTTT CCGTCC TGGT GAAAAGGACA CCTTCC TGCC
CGCCCACCAT GTCTTCCTTG GAAATGCCAG GAAATGGGCT CTGTGCTGAT CCAGCTATTT
GGGAGCAGTG TCATGGACAT (A/G) (SNP)
(T/C) (SNP COMPLEMENT SEQUENCE)
GGCAGAGGGA CAGGCTTATC AGCC AGTGGT GTCTGAGTCT CCCGACCTCC CGGTGGGGCC
CGTCTCCCT GTCCGAATAG TCG (COMPLEMENT SEQUENCE)
TTCTGGGCCC TGCCGGCTCT TCTGTTTTCC AGAGACCAGA CCTTCCTCCC TGTGGGAGGA
CAGGGTACCA CACAGAAGCG GACAGTGACA GTGCTGTACC CGCACAGAAC TAGTTTATTC
AGTAGTATGG GGCATGAAAA AACAACAACA ACAAACGCT ACCCTATTTA CAGCAACAAC
CAAACGTGAC AATCTGATGG TTAGTACCAA GTTAGCATCC AGCATCTTTG TATTTTTTTT
AAATCAAGTC ATCAGTAGTA AAAACCAGTT AAATTTTTAA CCCTTTGCAG GAATTGCTGA
GGGGAGAAGA CGGGG GAGAA TCCACGGCAG AAAAGCCAGA GGCTGGCCTC ACAAATGAGA
TACTT AGGTGCCGTC TTTTC (COMPLEMENT SEQUENCE)
AACAGGAGCC TTTCTTTTCT GCCCAGACCC TCTTTTTTCTA GCCACCTGCT CCAGAAGGAA
AGTCAGTGAC AAGTCTGGAA
```

Primers Sequence:	Melting temperature.
Forward inner primer (G allele): 476 TATTTGGGAGCAGTGTCATGGACGTG 501	60.7
Reverse inner primer (A allele): 525 GCCTGATAAGCCTGTCCCTCTGACT 501	61.9
Forward outer primer (5'- 3'): 397 TGGTGAAAAGGACACCTTCC 416	55.0
Reverse outer primer (5'- 3'): 896 CTTTTCTGCCGTGGATTCTC 877	53.8
Product size for G allele: 420	
Product size for A allele: 129	
Product size of two outer primers: 500	

Primer\_Blast Reports:

Primer pair 1 (Outer band)

	Sequence (5'->3')	Length	Tm	GC%	Self complementarity	Self-3' complementarity
<b>Forward primer</b>	TGGTGAAAAGGACACCTTCC	20	57.64	50.00	5.00	2.00
<b>Reverse primer</b>	CTTTTCTGCCGTGGATTCTC	20	56.81	50.00	3.00	2.00

Products on target templates

>NC\_000001.11 Homo sapiens chromosome 1, GRCh38.p14 Primary Assembly

product length = 500

Features flanking this product:

1465 bp at 5' side: cadherin egf lag seven-pass g-type receptor 2 precursor

4108 bp at 3' side: proline/serine-rich coiled-coil protein 1 isoform x4

Forward primer 1                    TGGTGAAAAGGACACCTTCC    20  
 Template                    109276012 .....    109275993

Reverse primer 1                    CTTTTCTGCCGTGGATTCTC    20  
 Template                    109275513 .....    109275532

Primer pair 2 (Inner band G allele)

	Sequence (5'->3')	Length	Tm	GC%	Self complementarity	Self-3' complementarity
<b>Forward primer</b>	TATTTGGGAGCAGTGTCATG GACGTG	26	65.10	50.00	4.00	2.00
<b>Reverse primer</b>	CTTTTCTGCCGTGGATTCTC	20	56.81	50.00	3.00	2.00

Products on target templates

>NC\_000001.11 Homo sapiens chromosome 1, GRCh38.p14 Primary Assembly

product length = 421

Features flanking this product:

1465 bp at 5' side: cadherin egf lag seven-pass g-type receptor 2 precursor

4187 bp at 3' side: proline/serine-rich coiled-coil protein 1 isoform x4

Forward primer 1                    TATTTGGGAGCAGTGTCATGGACGTG    26  
 Template                    109275933 .....A..    109275908

Reverse primer 1                    CTTTTCTGCCGTGGATTCTC    20  
 Template                    109275513 .....    109275532

Primer pair 3 (Inner band A allele)

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity	Self-3' complementarity
<b>Forward primer</b>	TGGTGAAAAGGACACCTTCC	20	57.64	50.00	5.00	2.00
<b>Reverse primer</b>	GCCTGATAAGCCTGTCCCTC TGACT	25	56.81	56.00	4.00	1.00

Products on target templates

>NC\_000001.11 Homo sapiens chromosome 1, GRCh38.p14 Primary Assembly

product length = 129

Features flanking this product:

1840 bp at 5' side: cadherin egf lag seven-pass g-type receptor 2 precursor

4108 bp at 3' side: proline/serine-rich coiled-coil protein 1 isoform x4

Forward primer 1                    TGGTGAAAAGGACACCTTCC    20  
 Template                    109276012 ..... 109275993

Reverse primer 1                    GCCTGATAAGCCTGTCCCTCTGACT    25  
 Template                    109275884 .G.....C.G 109275908