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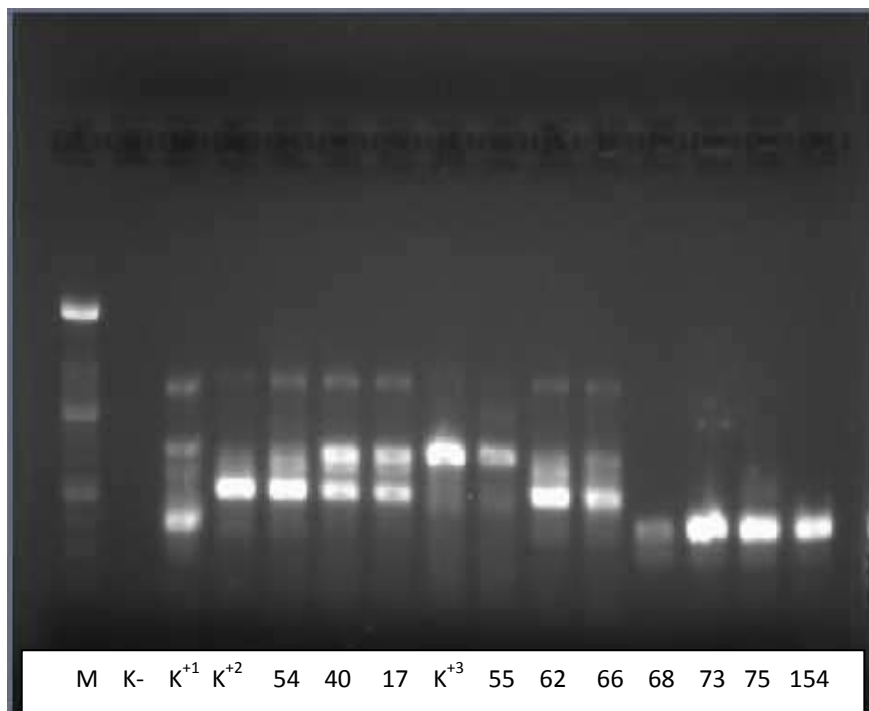
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### Lampiran 3 Daftar Subjek Penelitian

No	Kode	Jenis Kelamin	Umur (tahun)	Asal
1	580779	L	18	Makassar
2	590848	L	45	Makassar
3	L-10-F2	L	43	Makassar
4	I-1A-K2	L	40	Makassar
5	595500	L	63	Makassar
6	593777	L	60	Makassar
7	592524	L	59	Makassar
8		L	65	Makassar
9	594199	L	40	Makassar
10	526158	L	30	Makassar
11	177168	L	61	Makassar
12	075134	L	38	Makassar
13	595156	P	54	Makassar
14	595993	L	20	Makassar
15	008691	L	59	Makassar
16	597689	L	28	Makassar
17	597705	P	48	Makassar
18	597294	L	40	Makassar
19	595222	L	38	Makassar
20	415782	P	40	Makassar
21	604433	L	26	Makassar
22	600587	P	49	Makassar
23	606423	L	35	Makassar
24	EIJKH-B374	P	37	Jakarta
25	EIJKH-B400	P	14	Jakarta
26	EIJKH-B491	L	30	Jakarta
27	EIJKH-B477	L	21	Jakarta
28	EIJKH-B278	L	17	Jakarta
29	EIJKH-B466	L	18	Jakarta
30	EIJKH-B455	P	17	Jakarta
31	EIJKH-B202	L	56	Jakarta
32	EIJKH-B516	P	30	Jakarta
33	EIJKH-B631	L	41	Jakarta
34	EIJKH-B639	P	29	Jakarta
35	EIJKH-B649	P	39	Jakarta
36	EIJKH-B655	L	59	Jakarta
37	EIJKH-B660	L	41	Jakarta
38	EIJKH-B800	P	55	Jakarta
39	EIJKH-B757	L	32	Jakarta
40	EIJKH-B702	L	38	Jakarta
41	EIJKH-	L	50	Jakarta
42	EIJKH-B763	P	26	Jakarta
43	EIJKH-B764	P	27	Jakarta
44	EIJKH-B745	L	21	Jakarta
45	EIJKH-B719	P	68	Jakarta

#### Lampiran 4 Hasil elektroforesis

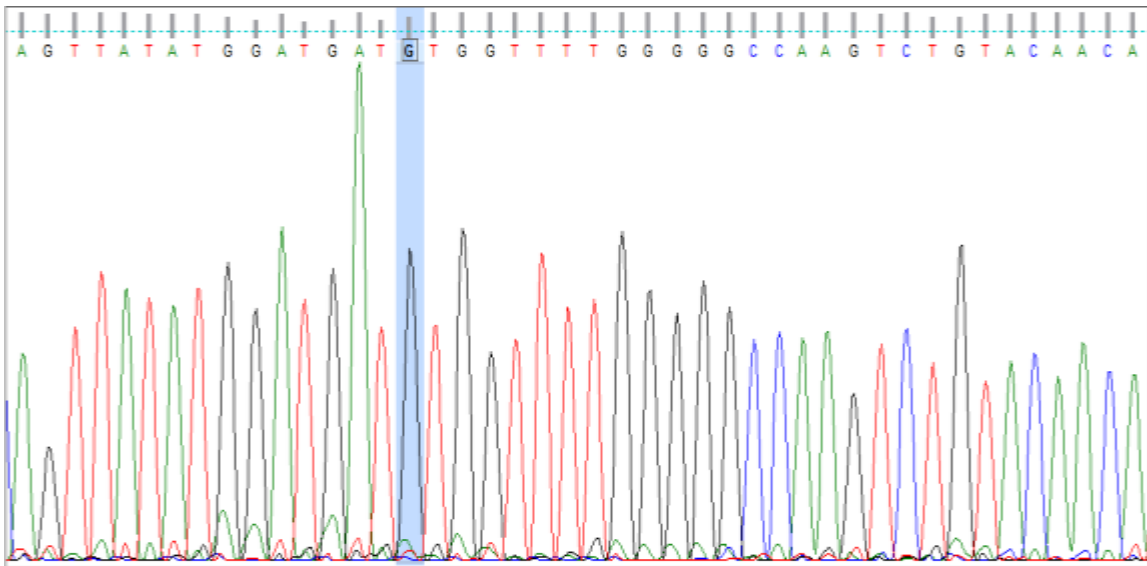


Keterangan :

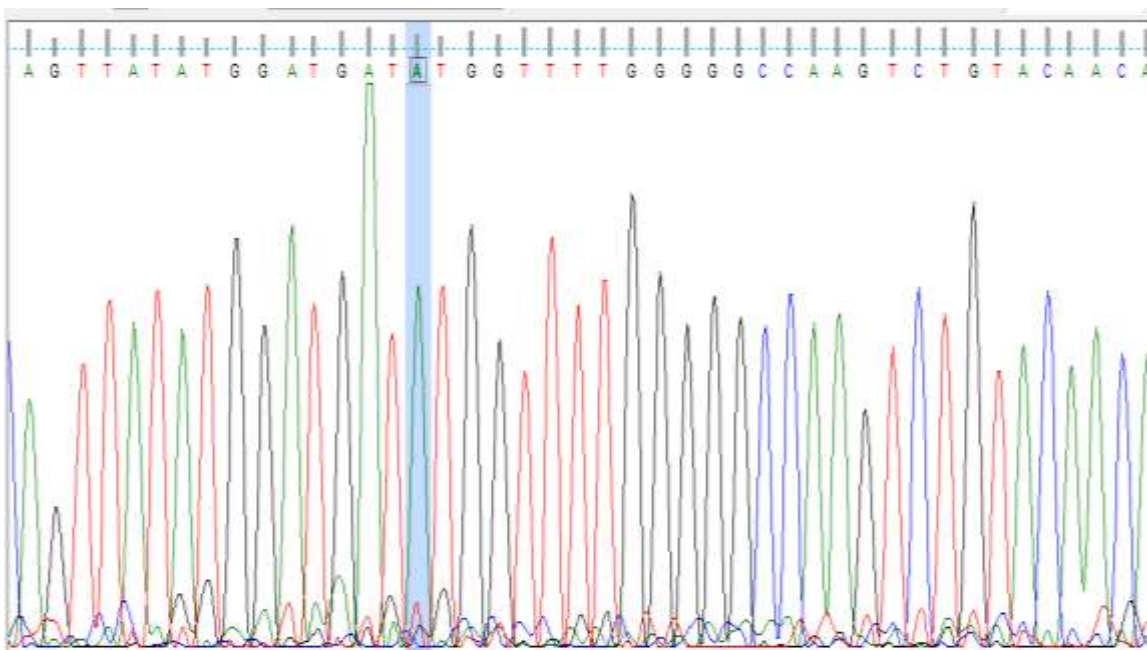
- M : Marker
- K<sup>+1</sup> : Kontrol Positif untuk fragment S21/850R ( 392pb)
- K<sup>+2</sup> : Kontrol Positif untuk fragment S88/HS42 ( 514 pb)
- 54 : Sampel no 54
- 40 : Sampel no 40
- 17 : Sampel no 17
- K<sup>+3</sup> : Kontrol positif untuk fragmen S21/HS62 (740 pb)
- 55 : Sampel no 55
- 62 : Sampel no 62
- 66 : Sampel no 66
- 68 : Sampel no 68
- 73 : Sampel no 73
- 75 : Sampel no 75
- 154 : Sampel no 154

### Lampiran 5 Hasil analisis elektroferogram

Posisi asam amino G748A



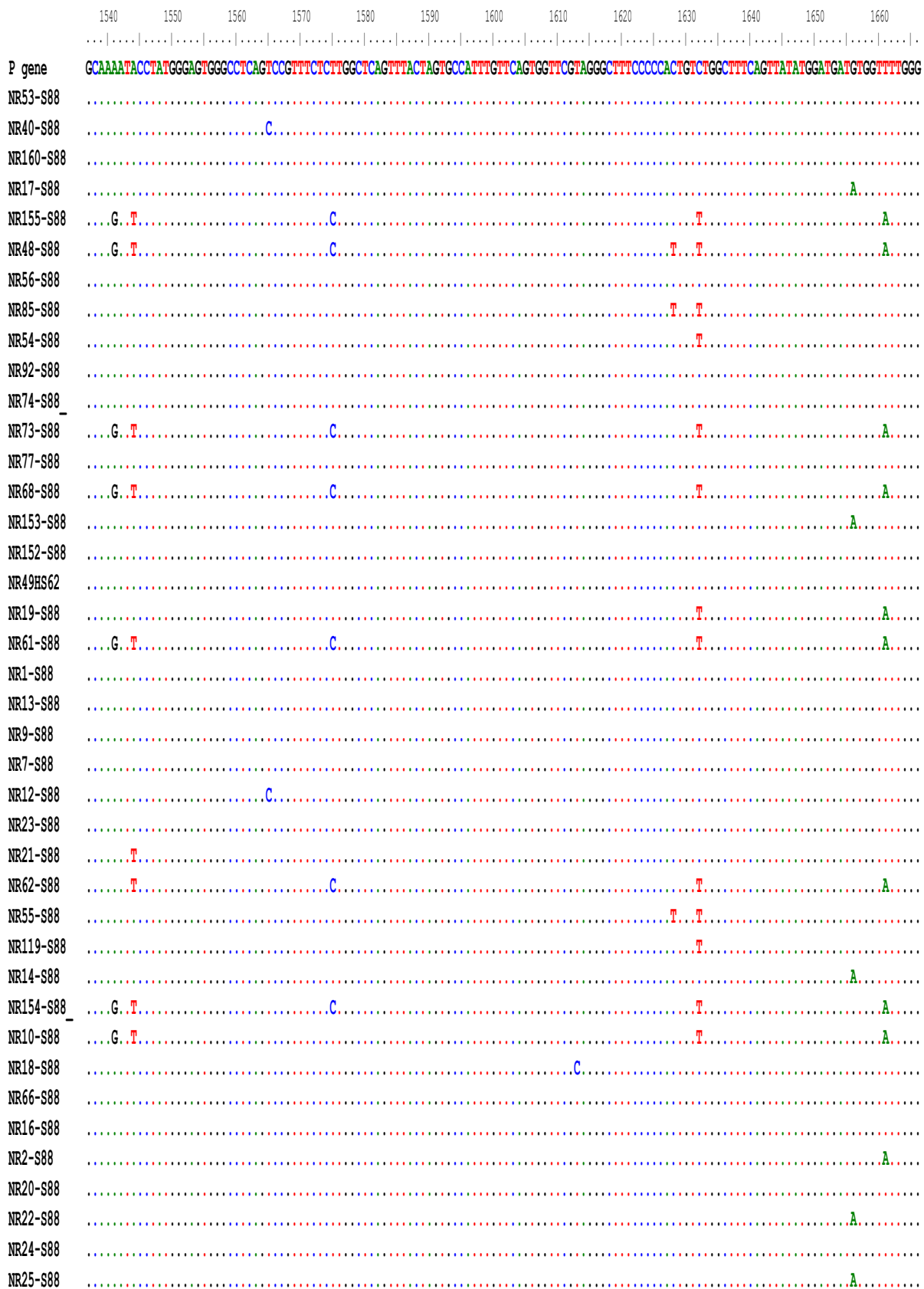
Ket; *wild type*, posisi 748 adalah guanin.



Ket; mutasi pada posisi 748, guanin menjadi adenin.

## Lampiran 6 Hasil analisis Bioedit sekuensing gen P

	1410	1420	1430	1440	1450	1460	1470	1480	1490	1500	1510	1520	1530
P gene	CACCAGCACCGGACCATGCAAAACCTGCACGACTCCTCAAGGAACCTATGTTTCCTCATGTTGCTGTACAAAACCTACGGACGGAAACTGCACCTGTATTCCCATCCCATCATCTTGGGCTTC												
NR53-S88													G
NR40-S88													
NR160-S88			C	G									
NR17-S88	G		G										
NR155-S88	G		G		T		T		T		T	T	
NR48-S88			G		T		T		T		A	T	T
NR56-S88													
NR85-S88									T				
NR54-S88					G								
NR92-S88			G										
NR74-S88					G								
NR73-S88			G		T		T		T		T	T	
NR77-S88													
NR68-S88	G		C		A		T		T		T	T	
NR153-S88			G										
NR152-S88			G		C		A		C				
NR49HS62							A		TC				
NR19-S88					A								
NR61-S88							T		T		T	T	
NR1-S88													
NR13-S88													
NR9-S88					A								
NR7-S88													T
NR12-S88					A								
NR23-S88													
NR21-S88													
NR62-S88							C		T		T	T	T
NR55-S88			G				T						
NR119-S88							T						T
NR14-S88													
NR154-S88			G		T		T		T		T	T	
NR10-S88					T		T		T		T	T	
NR18-S88													
NR66-S88							A						
NR16-S88			T		A				C			T	
NR2-S88													
NR20-S88			T		A								
NR22-S88			G										
NR24-S88													
NR25-S88													
NR26-S88			G										
NR27-S88													T
NR4-S88			G										
NR8-S88							T		T		T	T	
NR96-S88			G				C		T		T	T	

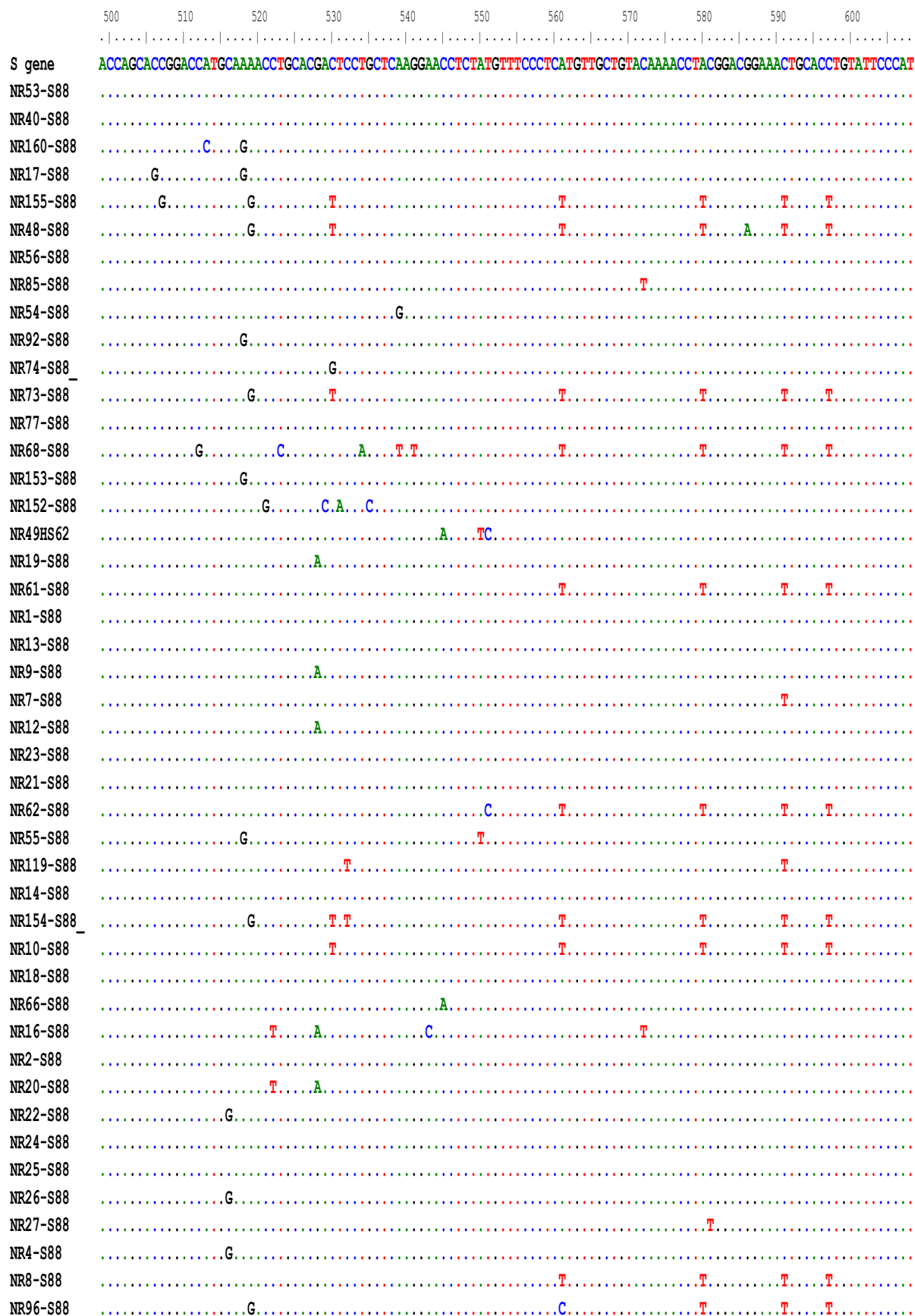


### Lampiran 7 Hasil analisis Bioedit sekuensing asam amino gen P

	130	140	150	160	170	180	190	200	210	220	230	240	250				
P gene	HQRRTMQLNLDSCSRNLYVSLMLLYKTYGRKLELYSHPIILGFRKIPMGVGLSPFLLAQFTSAICSVVRRAPPHCLAFSYMDDVVLCAGKSVQHLESLYAAVTNELLSLGHIHLPQKTKRWGYSLNEMGY																
NR56-S88											V	A	H	H			
NR53-S88	V													H	H		
NR77-S88											H	H					
NR19-S88	N														H		
NR49HS62	K.F											H	H				
NR92-S88												H	H				
NR17-S88	Q									M					H	H	
NR26-S88	E									M					K		
NR14-S88									M								
NR25-S88									M						K		
NR22-S88	E									M					K		
NR27-S88									M						K		
NR160-S88	L											H	H	F			
NR155-S88	G	D	L	F								FTS	N				
NR74-S88	E											H	H				
NR48-S88	D	L	F	Q								FT	N				
NR21-S88														H			
NR13-S88														H			
NR12-S88	N														H		
NR9-S88	N											T			H		
NR1-S88										T	I	H	H				
NR40-S88																	
NR73-S88	D	L	F								FTSI	N					
NR85-S88																	
NR61-S88	L								F						FT	T	
NR2-S88														K			
NR54-S88																	
NR68-S88	P	S	M	L	F								FT	T			
NR152-S88	K	ATS															
NR4-S88	E														K		
NR7-S88											V						
NR23-S88																	
NR62-S88	L								F						N		
NR55-S88	F													H	K		
NR119-S88	F														N		
NR154-S88	D	F	L	F								FTSI					
NR10-S88	L								F						T	FT	K
NR18-S88																	
NR66-S88	K																
NR16-S88	N	H															
NR2-S88														K			
NR153-S88														K			
NR20-S88	N																
NR24-S88											H	K	K				
NR8-S88	L								F						T	FT	K
NR96-S88	D	L	F														



**Lampiran 8 Hasil analisis Bioedit sekuensing gen S**

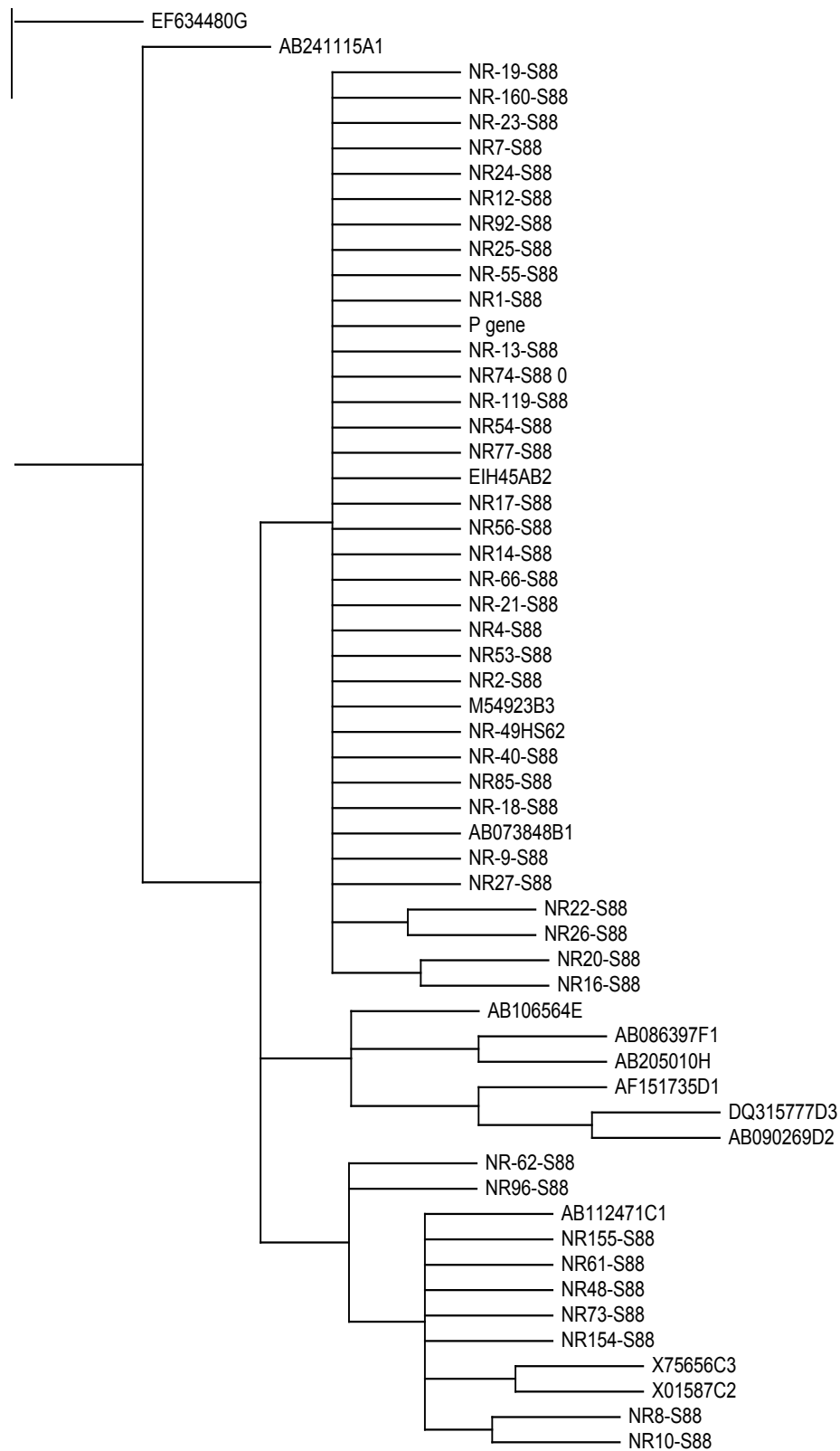








### Lampiran 10 Hasil analisis penentuan genotype



### Lampiran 11 Hasil analisis perhitungan indeks antigenisitas

Wild type#			Varian M133S		Varian C121W		Varian P127S		Varian T131N	
Posisi	Residu	Indeks antigenik	Residu	Indeks antigenik	Residu	Indeks antigenik	Residu	Indeks antigenik	Residu	Indeks antigenik
116	Thr	0,45	Thr	0,45	Thr	0,45	Thr	0,45	Thr	0,45
117	Ser	0,7	Ser	0,7	Ser	0,7	Ser	0,7	Ser	0,7
118	Thr	0,8	Thr	0,8	Thr	0,8	Thr	0,8	Thr	0,8
119	Gly	1,65	Gly	1,65	Gly	1,65	Gly	1,65	Gly	1,65
120	Pro	2,25	Pro	2,25	Pro	2,25	Pro	2,25	Pro	2,25
121	Cys	2,5	Cys	2,5	Trp	2,5	Cys	2,5	Cys	2,5
122	Lys	2,25	Lys	2,25	Lys	1,85	Lys	1,85	Lys	2,25
123	Thr	0,6	Thr	0,6	Thr	0,6	Thr	0,6	Thr	0,6
124	Cys	0,5	Cys	0,5	Cys	0,2	Cys	0,2	Cys	0,5
125	Thr	0,7	Thr	0,7	Thr	-0,05	Thr	-0,05	Thr	0,7
126	Thr	0,25	Thr	0,25	Thr	-0,6	Ile	-0,6	Thr	0,25
127	Pro	0,4	Pro	0,4	Pro	-0,4	Ser	-0,4	Pro	0,4
128	Ala	0,8	Ala	0,8	Ala	0,25	Ala	0,25	Ala	0,8
129	Gln	0,8	Gln	0,96	Gln	0,8	Gln	0,8	Gln	0,96
130	Gly	0,65	Gly	1,72	Gly	0,65	Gly	0,65	Gly	1,72
131	Thr	0,35	Asn	1,13	Thr	0,35	Thr	0,35	Asn	1,13
132	Ser	0,35	Ser	1,29	Ser	0,15	Ser	0,15	Ser	1,29
133	Met	-0,2	Ser	1,6	Met	0	Met	0	Ser	1,6
134	Phe	-0,2	Phe	1,29	Phe	-0,2	Phe	-0,2	Phe	1,29
135	Pro	0,2	Pro	0,83	Pro	0,2	Pro	0,2	Pro	0,83
136	Ser	0,2	Ser	0,52	Ser	0,2	Ser	0,2	Ser	0,52
137	Cys	0,2	Cys	0,36	Cys	0,2	Cys	0,2	Cys	0,36
138	Cys	0,64	Cys	0,64	Cys	0,64	Cys	0,64	Cys	0,64
139	Cys	1,18	Cys	1,18	Cys	0,98	Cys	0,98	Cys	1,18
140	Thr	1,27	Thr	1,27	Thr	1,47	Thr	1,47	Thr	1,27
141	Lys	2,36	Lys	2,36	Lys	2,46	Lys	2,46	Lys	2,36
142	Pro	3,4	Pro	3,4	Pro	3,4	Pro	3,4	Pro	3,4
143	Thr	2,86	Thr	2,86	Thr	3,06	Ser	3,06	Thr	2,86

# GenBank (Accession Number M549233)

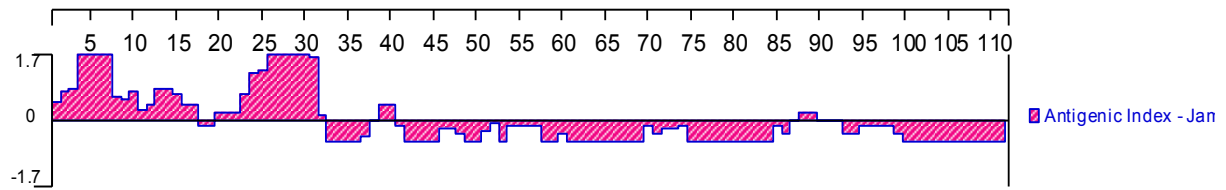
**Lanjutan Lampiran 11**

<b>Wild type#</b>			<b>Varian S204R</b>	
Posisi	Residu	Indeks antigenik	Residu	Indeks antigenik
195	Ile	-0,6	Ile	-0,6
196	Trp	-0,6	Trp	-0,6
197	Met	-0,6	Met	-0,6
198	Met	-0,6	Met	-0,6
199	Trp	-0,6	Trp	-0,2
200	Phe	-0,2	Tyr	-0,2
201	Trp	-0,4	Trp	-0,05
202	Gly	0	Gly	0
203	Pro	0,15	Pro	0,2
204	Ser	0,15	Arg	0,35
205	Leu	0	Leu	0,45
206	Tyr	0	Tyr	-0,4
207	Asn	0	Asn	-0,4
208	Ile	-0,4	Ile	-0,4
209	Leu	-0,4	Leu	-0,4
210	Ser	-0,2	Asn	-0,2
211	Pro	-0,2	Pro	-0,2
212	Phe	-0,2	Phe	-0,2
213	Met	-0,2	Leu	-0,2
214	Pro	-0,4	Pro	-0,4

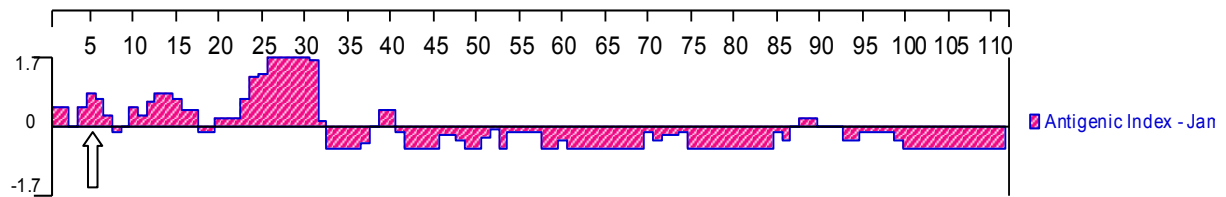
# GenBank (Accession Number M549233)

## Lampiran 12 Grafik perubahan indeks antigenisitas

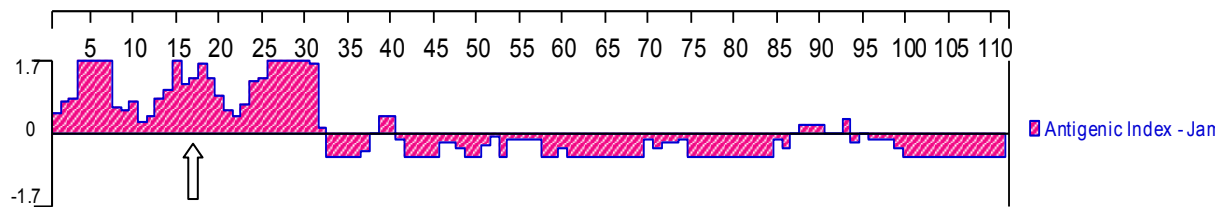
### Wild-type



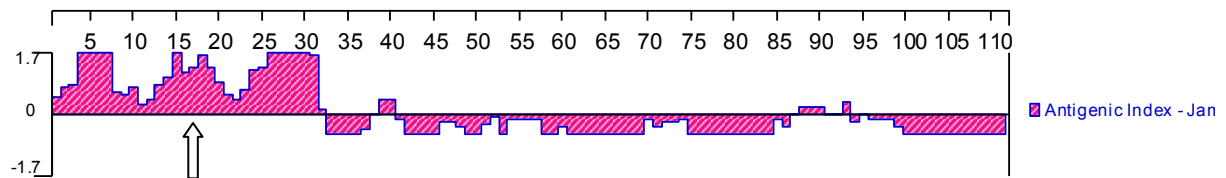
### C121W



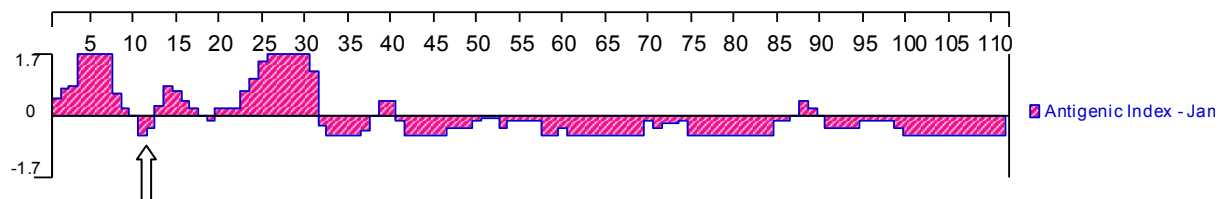
### T131N



### M133S



### P127S



### S204R

