



Supplementary Figure 1a - The 'Data and Scoring' tab included in the TnT software. Settings, SNP distributions and the total score of the four different 3-dNTP combinations are presented.

SNP Id	Type	varia...	3-dN...	Sc...	Ex...	Ext	3-d...	Sc...	Ext...	Ext	3-dN...	Sc...	Ext...	Ext	3-d...	Sc...	E...	Ext	Exclude
rs8679	Y	C/T	CTA	16	4	YACT	TGC	2	1	Y	GTA	8	3	RTT	AGC	2	1	R	<input type="checkbox"/>
rs10847	R	A/G	AGC	16	4	RGAC	GTA	8	3	RGA	TGC	8	3	YTG	CTA	4	2	YT	<input type="checkbox"/>
rs14804	Y	C/T	CTA	8	3	YAT	TGC	2	1	Y	GTA	8	3	RTG	AGC	2	1	R	<input type="checkbox"/>
rs875233	Y	C/T	CTA	8	3	YCC	TGC	16	4	YCCG	GTA	2	1	R	AGC	4	2	RC	<input type="checkbox"/>
rs2273267	W	A/T	CTA	2	1	W	GTA	8	3	WGA	GTA	8	3	WTG	CTA	4	2	WT	<input type="checkbox"/>
rs3021094	M	A/C	CTA	2	1	M	AGC	32	9	MGGAGGACC	GTA	2	1	K	TGC	64	5	KCCTC	<input type="checkbox"/>
rs3024496	Y	C/T	CTA	16	4	YATA	TGC	2	1	Y	GTA	32	10	RAGAGAGGTA	AGC	32	8	RAGAGAGG	<input type="checkbox"/>
rs3765702	Y	C/T	CTA	2	1	Y	TGC	16	12	YGGCTCGGTCTC	GTA	4	2	RT	AGC	2	1	R	<input type="checkbox"/>
rs3765713	R	A/G	AGC	64	6	RCAGAG	GTA	2	1	R	TGC	32	9	YTCGTTCTG	CTA	8	3	YTC	<input type="checkbox"/>
rs6186	R	A/G	AGC	2	1	R	GTA	64	6	RTGGTT	TGC	64	6	YTGSTG	CTA	4	2	YT	<input type="checkbox"/>
rs17561	K	G/T	GTA	2	1	K	TGC	4	2	KC	CTA	4	2	MT	AGC	2	1	M	<input type="checkbox"/>
rs1042821	Y	C/T	CTA	4	2	YC	TGC	32	8	YCGGGGGC	GTA	8	3	RGG	AGC	64	5	RGGCC	<input type="checkbox"/>
rs1800587	Y	C/T	CTA	64	5	YCATT	TGC	4	2	YC	GTA	64	6	RTGTTG	AGC	2	1	R	<input type="checkbox"/>
rs2229571	S	C/G	AGC	32	9	SAAAAACAG	TGC	2	1	S	TGC	32	8	SCTCCCTG	AGC	4	2	SC	<input type="checkbox"/>
rs3136228	K	G/T	GTA	2	1	K	TGC	32	10	KCTCCTTGGC	CTA	4	2	MC	AGC	0	21	MCGGAGCGA...	<input type="checkbox"/>
rs3210400	R	A/G	AGC	64	7	RCAGAGG	GTA	2	1	R	TGC	16	11	YCTGCCCGCTC	CTA	8	3	YCT	<input type="checkbox"/>
rs1464645	Y	C/T	CTA	2	1	Y	TGC	4	2	YG	GTA	4	2	RT	AGC	2	1	R	<input type="checkbox"/>
rs2286940	Y	C/T	CTA	4	2	YA	TGC	2	1	Y	GTA	64	6	RGTAGA	AGC	4	2	RG	<input type="checkbox"/>
rs11466512	W	A/T	CTA	8	3	WCA	GTA	2	1	W	GTA	32	9	WTGGGGAAA	CTA	4	2	WT	<input type="checkbox"/>
rs2254514	Y	C/T	CTA	2	1	Y	TGC	64	5	YGTGG	GTA	16	4	RATG	AGC	4	2	RA	<input type="checkbox"/>

Supplementary Figure 1b - The second tab in the software displaying all possible in silico extensions for each SNP. The first three columns represent SNP Id, SNP Type and SNP variation. In the following columns, the score, the number of incorporated bases (Extension length) and the bases incorporated (Extension) in each possible in silico 3-dNTP extension are indicated. Note that self-complementary SNPs (W and S) generate two different dNTP extensions, while all others generate four. Marking of the last column excludes the SNP.



Supplementary Figure 1c - Primer selection for the TnT and PrASE reactions. Tags are marked as lowercase and primer sequences as uppercase letters.