

S11 Table. The identity between nucleus and mitochondrial RNA genes

RNA Genes	Nucleus	Identity	Mitochondrial	Identity
<i>RNase P</i>	RPR1	0.77	RPM1	0.43
<i>rRNA</i>	RDN5	1.00		
	RDN18	0.99	15S_rRNA	0.84
	RDN25	0.98	21S_rRNA	0.75
	RDN58	1.00		
<i>trnA</i>	Ala1	1.00	Ala	0.96
	Ala2	1.00		
<i>trnC</i>	Cys	1.00	Cys	0.97
<i>trnD</i>	Asp	1.00	Asp	1.00
<i>trnE</i>	Glu	0.99	Glu	0.97
<i>trnF</i>	Phe1	1.00	Phe	1.00
	Phe2	1.00		
<i>trnG</i>	Gly1	1.00		
	Gly2	1.00	Gly	0.99
	Gly3	0.97		
	Gly4	1.00		
<i>trnH</i>	His	0.93	His	0.97
<i>trnI</i>	Ile1	1.00	Ile	0.97
	Ile2	1.00		
<i>trnK</i>	Lys1	1.00	Lys	0.96
	Lys2	1.00		
<i>trnL</i>	Leu1	1.00		
	Leu2	1.00	Leu	0.99
	Leu3	0.99		
<i>trnM</i>	Met1	1.00	Met1	1.00
	Met2	0.97	Met2	1.00
<i>trnN</i>	Asn	1.00	Asn	0.95
<i>trnP</i>	Pro1	1.00	Pro	0.99
	Pro2	1.00		
<i>trnQ</i>	Gln1	1.00	Gln	1.00
	Gln2	1.00		
<i>trnR</i>	Arg1	1.00	Arg1	0.99
	Arg2	1.00	Arg2	0.97
	Arg3	1.00		
<i>trnS</i>	Ser1	1.00		
	Ser2	1.00	Ser1	0.98
	Ser3	1.00	Ser2	0.99
	Ser4	0.96		
<i>trnT</i>	Thr1	0.97	Thr1	1.00
	Thr2	0.97	Thr2	0.97
	Thr3	1.00		
<i>trnV</i>	Val1	0.97		
	Val2	1.00	Val	0.97
	Val3	1.00		
<i>trnW</i>	Trp	1.00	Trp	0.95
<i>trnY</i>	Tyr	0.99	Tyr	0.98

Note: We first predicted all nucleus tRNAs, rRNAs and RPR1 in other SSS yeasts based on the genes annotation in *S. cerevisiae*. Then we obtained the orthologous groups for all RNA genes by OrthoMCL. After that, we calculated the nucleotide identity for each orthologous group, if the group included genes in all five SSS yeasts.