

a) Biology

	Ser	His	Lys	Gly	Arg	Ser	Asp	Ala		
A:	TCC	CAT	AAG	GGG	CGG	T-- -CG	GAC	GCC	---	
D:	TCC	CA-	--G	GGG	CGG	TCC CCG	GAC	GCC	ACG	
	Ser	Gln		Gly	Arg	Ser	Pro	Asp	Ala	Thr

b) PRANK (codon) and MACSE

	Ser	His	Lys	Gly	Arg	Ser		Asp	Ala	
A:	TCC	CAT	AAG	GGG	CGG	TCG	---	GAC	GCC	---
D:	TCC	CAG	---	GGG	CGG	TCC	CCG	GCC	GCC	ACG
	Ser	Gln		Gly	Arg	Ser	Pro	Asp	Ala	Thr

c) MAFFT and ClustalΩ

	Ser	His	Lys	Gly	Arg	Ser	Asp	Ala	
A:	TCC	CAT	AAG	GGG	CGG	TCG	GAC	GCC	---
D:	TCC	CAG	GGG	CGG	TCC	CCG	GAC	GCC	ACG
	Ser	Gln	Gly	Arg	Ser	Pro	Asp	Ala	Thr

d) COATi

	Ser	His	Lys	Gly	Arg	Ser	Asp	Ala		
A:	TCC	CAT	AAG	GGG	CGG	T-- -CG	GAC	GCC	---	
D:	TCC	CA-	--G	GGG	CGG	TCC CCG	GAC	GCC	ACG	
	Ser	Gln		Gly	Arg	Ser	Pro	Asp	Ala	Thr