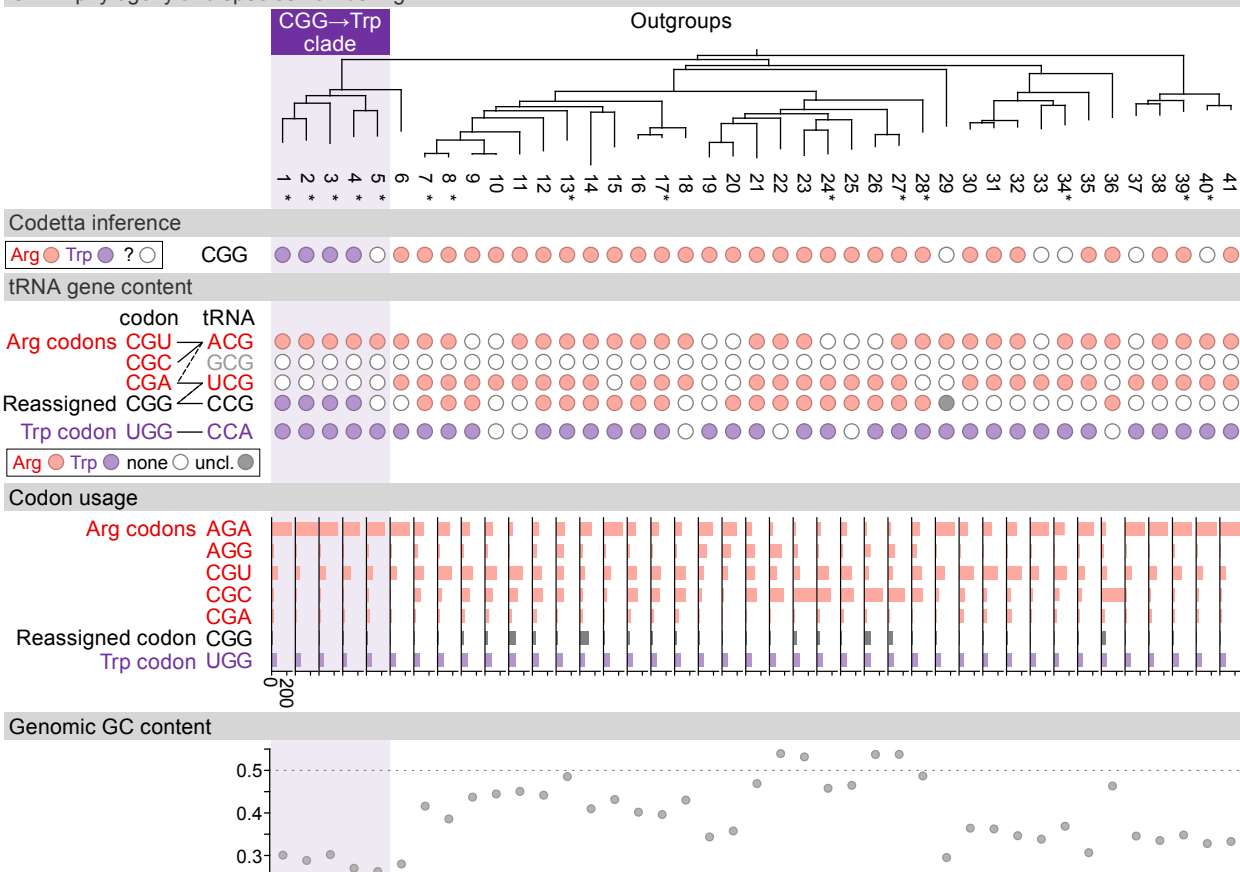


A

GTDB phylogeny and species numbering



B

Adenylosuccinate synthase (POG091H01G9)

Bacilli	1	..VVVGSQWGDEGK...	YVTLPGWKEDISK...
CGG→Trp	2	..VVLGSQWGDEGK...	YKTFKGWTEDISK...
clade	3	..VIQGTQAGDEGK...	YKDFCGADEDISN...
	4	..LVLGSQWGDEGK...	YKTFKGWTEDISK...
Outgroups	5	..VIEGSQWGDEGK...	YKEFKKFSFS-DK...
	6	..LVIGAQWGDEGK...	YKTFASWKEDISQ...
	7	..AIQGMQWGDEGK...	YIELPSWKEDISS...
	13	..AIOGSQWGDEGK...	YAIKFSWKEDISG...
	15	..AIEGMQWGDEGK...	YISLPSWKEDISH...
	28	..AIEGMQWGDEGK...	YKTLPGWKEDISN...

CTP synthase (POG091H02IX)

Bacilli	1	..DMSDWVKLIE...	GFGKRGVEGK...
CGG→Trp	2	..NMDDWIDLIS...	GFGNRGIEGK...
clade	3	..NMDDAIKLID...	GFGNRGIEGK...
	4	..EMSDWNLIR...	GFGNRGVEGK...
Outgroups	5	..DMSDWQALIK...	GFGTRGTEGK...
	6	..DMDDWRHFVH...	GFGKRGIDGM...
	8	..DLHEWRSWCD...	GFGKRGSKGK...
	13	..DLRNWQKWCD...	GFGKRGSEGK...
	17	..DLHNWEKWVD...	GFGKRGTEGK...
	21	..QLVDYEEFVS...	GFGKRGTDGM...

C

Bacilli CGG→Trp reassigned tRNA_{CCG}

1. uncultured Mollicutes bacterium
GCA_900540395.1

