

COG Process	COG ID	Description	<i>N. cyriacigeorgica</i> CDS in CMN pangenome	
			CDS number	CDS proportion
CELLULAR PROCESSES AND SIGNALING	D	Cell cycle control, cell division, chromosome partitioning	17	32.7%
	M	Cell wall/membrane/envelope biogenesis	54	29.0%
	N	Cell motility	10	13.3%
	O	Posttranslational modification, protein turnover, chaperones	48	31.2%
	T	Signal transduction mechanisms	43	13.9%
	U	Intracellular trafficking, secretion, and vesicular transport	15	32.6%
	V	Defense mechanisms	20	14.2%
	W	Extracellular structures	0	0.0%
INFORMATION STORAGE AND PROCESSING	A	RNA processing and modification	1	100.0%
	B	Chromatin structure and dynamics	1	50.0%
	J	Translation, ribosomal structure and biogenesis	135	65.5%
	K	Transcription	75	11.8%
	L	Replication, recombination and repair	72	29.4%
METABOLISM	C	Energy production and conversion	49	14.4%
	E	Amino acid transport and metabolism	127	19.0%
	F	Nucleotide transport and metabolism	46	40.4%
	G	Carbohydrate transport and metabolism	54	14.3%
	H	Coenzyme transport and metabolism	74	36.6%
	I	Lipid transport and metabolism	43	11.1%
	P	Inorganic ion transport and metabolism	50	11.1%
	Q	Secondary metabolites biosynthesis, transport and catabolism	18	4.6%
POORLY CHARACTERIZED	R	General function prediction only	98	10.0%
	S	Function unknown	38	14.0%

	(all CDS)	
	CDS number	% of genome CDS
	52	0.9%
	186	3.4%
	75	1.4%
	154	2.8%
	310	5.7%
	46	0.8%
	141	2.6%
	1	0.0%
	1	0.0%
	2	0.0%
	206	3.8%
	636	11.6%
	245	4.5%
	340	6.2%
	668	12.2%
	114	2.1%
	378	6.9%
	202	3.7%
	384	7.0%
	449	8.2%
	391	7.2%
	978	17.9%
	272	5.0%