

Sequence Length	ESMFold Run-Time (per amino acid)	AlphaFold Run-Time (per amino acid)
84	2.49s (0.03s)	2min 28s (1.762s)
193	9.25s (0.048s)	7min 48s (2.42s)
281	22.6s (.08s)	4min 41s (1s)
393	54.2s (0.138s)	15min 44s (2.402s)
486	1min 38s (0.202s)	23min 38s (2.917s)
619	1min 24s (0.136s)	39min 30s (3.829s)

**Table 1**

Run-Times of ESMFold and AlphaFold using Colab notebook on sample proteins

Sequence Length	ESMFold Run-Time	Per Amino Acid Run-Time
67	11.7s	0.175s
84	5.5s	0.065s
163	15.7s	0.096s
186	20.0s	0.107s
231	32.5s	0.102s
282	51.1s	0.181s
369	95.6s	0.259s
417	(Out-of-memory)	-

**Table 2**

Run-Times of ESMFold on CARC. Used 1 node on the singleGPU partition

Although we did run AlphaFold on CARC using this benchmarking set, times are not shown because *the job did not finish after 5 hours* (CARC cancels jobs that run past their allotted time). After inspecting the output file it was found that AlphaFold had only finished predictions for half of the proteins (it was working on the protein with sequence length 231).