**Query 1,024 full-length protein chains**

**Database PDB95 (152k chains)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Machine | Threads | Time (hh:mm:ss) | Secs | Throughput  pairs/thread/sec | Max RAM  (Mb) |
| c6a.16xlarge | 64 | 5:15 | 315 | 7,720 | 313 |
| i9-14900K-3.2GHz | 32 | 6:25 | 385 | 12,600 | 240 |
| c5.4xlarge | 16 | 22:58 | 1,378 | 7,064 | 123 |
| t2.2xlarge | 8 | 40:54 | 2,454 | 7,927 | 79 |
| t2.xlarge | 4 | 2:26:29 | 8,789 | 4,427 | 57 |

**Query 1,024 full-length protein chains**

**Database BFVD (348k chains)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Machine | Threads | Time (hh:mm:ss) | Secs | Throughput  pairs/thread/sec | Max RAM  (Mb) |
| c6a.16xlarge | 64 | 6:30 | 390 | 14,200 | 252 |
| i9-14900K-3.2GHz | 32 | 8:18 | 498 | 22,300 | 179 |
| c5.4xlarge | 16 | 29:29 | 1,769 | 12,600 | 96 |
| t2.2xlarge | 8 | 4:33:32 | 16,412 | 2,710 | 67 |
| t2.xlarge | 4 | 4:47:40 | 17,260 | 5,154 | 51 |

**Machine i9-14900K-3.2GHz, 32 threads**

**Database AFDB50, one chunk (1M chains)**(Multiply time by 54 chunks for full AFDB)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Query chains | Time (hh:mm:ss) | Secs | Throughput  pairs/thread/sec | Max RAM  (Mb) |
| 1024 | 42:52 | 2,572 | 12,400 | 267 |
| 128 | 6:34 | 392 | 10,100 | 249 |
| 1 | 1:23 | 83 | 377 | 230 |