

3. Results:

Gene Sequence Alignment

	sequence1	sequence2	sequence3	sequence4	sequence5	sequence6	sequence7	sequence8	sequence9	sequence10
sequence1	-30	-1	4956	4956	4956	4956	4956	4956	4956	4956
sequence2		-33	4948	4948	4948	4948	4948	4948	4948	4948
sequence3			-3000	-2996	-2956	-2944	-1431	-1448	-1399	-1448
sequence4				-3000	-2960	-2948	-1431	-1448	-1399	-1448
sequence5					-3000	-2988	-1423	-1452	-1391	-1448
sequence6						-3000	-1426	-1452	-1394	-1448
sequence7							-3000	-2771	-2814	-2767
sequence8								-3000	-2731	-2996
sequence9									-3000	-2727
sequence10										-3000

Label 3:

Sequence 3:

Sequence 10:

Label 10:

late BCoV-ENT, complete genome.

t-gatctctttagatctttcataatctaaactttataaaaacatccactccctgt-a

:caaactctgttagtttaaatc-taatctaaactttat--aaac-ggcacttcctgtgt

rain Penn 97-1, complete genome.

Process

Clear

☐ Banded Align Length: 1000

Done. Time taken: 55.565 seconds.

Alignments:

K=3000 Banded d=3

Gene Sequence Alignment

	sequence1	sequence2	sequence3	sequence4	sequence5	sequence6	sequence7	sequence8	sequence9	sequence10
sequence1	-30	-1	inf	inf	inf	inf	inf	inf	inf	inf
sequence2		-33	inf	inf	inf	inf	inf	inf	inf	inf
sequence3			-9000	-8984	-8888	-8848	-2735	-2743	-1429	-2735
sequence4				-9000	-8888	-8848	-2739	-2748	-1426	-2740
sequence5					-9000	-8960	-2711	-2739	-1426	-2727
sequence6						-9000	-2708	-2728	-1415	-2716
sequence7							-9000	-8103	-1256	-8099
sequence8								-9000	-1310	-8980
sequence9									-9000	-1315
sequence10										-9000

Label 3:

Sequence 3:

Sequence 10:

Label 10:

late BCoV-ENT, complete genome.

t-gatctctttagatctttcataatctaaactttataaaaacatccactccctgt-a

:caaactctgttagtttaaatc-taatctaaactttat--aaac-ggcacttcctgtgt

rain Penn 97-1, complete genome.

Process

Clear

☒ Banded Align Length: 3000

Done. Time taken: 7.233 seconds.

4. Alignments:

K=1000 Unrestricted

```
3 gattgcgagcgatttgcgtgcgtgcat-ccc--gcttcact-gatctctttagatctttcataatctaaactttataaaaacatccactccctgt-a
10 -a-taagagtgattggcgtccgtacgtaccctttctactctcaaacctttagtttaaatc-taatctaaactttat--aaac-ggcacttcctgtgt
```

K=3000 Banded d=3

```
3 gattgcgagcgatttgcgtgcgtgcat-ccc--gcttcact-gatctctttagatctttcataatctaaactttataaaaacatccactccctgt-a
10 -a-taagagtgattggcgtccgtacgtaccctttctactctcaaacctttagtttaaatc-taatctaaactttat--aaac-ggcacttcctgtgt
```