## Additional file 1

Table S1: Comparison of the newly developed real-time RT-PCRs with the one published by Dervas et al. (positive samples)

|  |  |  |  |
| --- | --- | --- | --- |
| sample number | Species | This study | Dervas et al. 2017 |
| 118171 | Ball python | 26.86 | 28.81 |
| 118208 | Burmese python | 33.33 | 29.69 |
| 118696 | Ball python | 29.17 | 25.39 |
| 118697 | Ball python | 28.52 | 26.49 |
| 119395 | Green Tree python | 23.36 | 23.50 |
| 121321 | Ball python | 30.67 | 30.5 |
| 121325 | Ball python | 29.05 | 31.99 |
| 121326 | Burmese python | 27.92 | 26.30 |
| 122336 | Green Tree python | 17.37 | 17.65 |
| 123279 | Green Tree python | 22.94 | 22.22 |
| 123282 | Green Tree python | 25.15 | 25.1 |
| 123284 | Green Tree python | 23.69 | 23.72 |
| 123285 | Green Tree python | 22.12 | 22.27 |
| 124075 | Ball python | 21.24 | 23.25 |
| 124076 | Ball python | 25.84 | 27.23 |
| 128183 | Green Tree python | 21.37 | 20.19 |
| 128184 | Green Tree python | 20.51 | 20.93 |
| 128185 | Green Tree python | 23.40 | 24.14 |
| 131981 | Carpet python | 15.81 | 13.85 |
| 132578 | Ball python | 25.81 | 25.45 |
| 132579 | Ball python | 28.95 | 30.00 |
| 133859 | Green Tree python | 27.93 | 26.39 |
| 133860 | Green Tree python | 24.23 | 21.4 |
| 137237 | Green Tree python | 26.54 | 29.83 |
| 137239 | Green Tree python | 21.94 | 23.85 |
| 137240 | Green Tree python | 26.38 | 27.35 |
| 137241 | Green Tree python | 16.68 | 14.18 |
| 137242 | Green Tree python | 20.52 | 17.95 |
| 138139 | Papua python | 35.33 | 34.24 |
| 138140 | Green Tree python | 22.63 | 21.01 |
| 139276 | Blood python | 19.82 | 18.97 |
| 139291 | Green Tree python | 16.99 | 19.37 |
| 139292 | Green Tree python | 18.94 | 19.25 |
| 139895 | Burmese python | 31.8 | 31.3 |
| 141487 | Carpet python | 19.6 | 21.3 |
| 141850 | Green Tree python | 27.2 | 26.7 |
| 143728 | Green Tree python | 20.9 | 19.9 |
| 143928 | Green Tree python | 22.2 | 22.1 |
| 144212 | Carpet python | 32.5 | 31.1 |
| 144220 | Carpet python | 23.7 | 21.4 |
| 144820 | Green Tree python | 28.4 | 30.7 |
| 145075 | Ball python | 28.7 | 30.5 |
| 145487 | Green Tree python | 31.2 | 27.6 |
| 148673 | Green Tree python | 24.2 | 24.2 |

Table S2: Sequence identity between all in this study generated partial sequences.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |   | MK182535//BH057/17-1 | MK182538//BH057/17-10 | MK182547//BH057/17-22 | MK182567//BH171/14-2 | MK182568//BH171/14-15 | MK182569//BH171/14-7 | MK182571//BH171/14-22 | MK182565//BH128/14-9 | MK182566//BH128/14-12 | MK182570//BH171/14-16 | MK182536//BH057/17-4 | MK182537//BH057/17-5 | MK182548//BH086/17-1 | MK182561//BH086/17-17 | MK182549//BH086/17-3 | MK182550//BH086/17-4 | MK182556//BH086/17-11 | MK182552//BH086/17-6 | MK182555//BH086/17-9 | MK182557//BH086/17-12 | MK182572//BH171/14-26 | MK182553//BH086/17-7 | MK182554//BH086/17-8 | MK182558//BH086/17-13 | MK182560//BH086/17-16 | MK182562//BH086/17-18 | MK182559//BH086/17-14 | MK182563//BH086/17-19 | MK182551//BH086/17-5 | MK182564//BH086/17-20 | MK182539//BH057/17-11 | MK182540//BH057/17-12 | MK182541//BH057/17-14 | MK182543//BH057/17-15 | MK182542//BH057/17-16 | MK182544//BH057/17-17 | MK182545//BH057/17-18 | MK182546//BH057/17-20 |
|   |   | Morelia viridis | Morelia viridis | Bothrochilus albertisii | Morelia viridis | Morelia viridis | Morelia viridis | Morelia viridis | Morelia viridis | Morelia viridis | Morelia viridis | Morelia viridis | Morelia viridis | Morelia viridis | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia viridis | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia spilota | Morelia viridis | Morelia viridis | Python molurus | Python molurus | Python molurus | Morelia spilota | Morelia spilota | Morelia spilota |
| MK182535//BH057/17-1 | Morelia viridis |   | 95.0 | 93.2 | 92.0 | 92.0 | 92.0 | 91.9 | 91.1 | 90.0 | 86.2 | 80.2 | 80.1 | 80.2 | 80.2 | 80.7 | 80.5 | 80.4 | 80.5 | 80.7 | 80.4 | 80.5 | 79.3 | 80.7 | 80.9 | 80.9 | 81.0 | 80.8 | 80.7 | 80.2 | 80.4 | 80.0 | 79.9 | 80.2 | 79.9 | 80.3 | 79.6 | 79.4 | 79.4 |
| MK182538//BH057/17-10 | Morelia viridis | 95.0 |   | 96.9 | 95.7 | 95.7 | 95.7 | 95.6 | 94.8 | 93.7 | 88.2 | 82.5 | 82.5 | 83.0 | 83.0 | 83.4 | 83.3 | 83.1 | 83.0 | 83.3 | 83.0 | 83.4 | 81.7 | 83.5 | 83.4 | 83.4 | 83.3 | 83.3 | 83.1 | 82.5 | 82.7 | 82.8 | 82.8 | 83.3 | 82.7 | 83.1 | 82.7 | 82.7 | 82.7 |
| MK182547//BH057/17-22 | Bothrochilus albertisii | 93.2 | 96.9 |   | 95.9 | 95.9 | 95.9 | 95.9 | 94.7 | 93.3 | 88.3 | 81.4 | 81.4 | 82.2 | 82.2 | 82.6 | 82.5 | 82.4 | 82.2 | 82.5 | 82.2 | 82.8 | 80.5 | 82.7 | 82.8 | 82.8 | 82.7 | 82.7 | 82.6 | 81.8 | 82.0 | 82.2 | 82.2 | 82.9 | 82.4 | 82.8 | 82.1 | 82.1 | 82.1 |
| MK182567//BH171/14-2 | Morelia viridis | 92.0 | 95.7 | 95.9 |   | 100.0 | 100.0 | 99.8 | 97.7 | 96.2 | 87.8 | 82.6 | 82.6 | 82.4 | 82.6 | 82.7 | 82.6 | 82.5 | 82.4 | 82.8 | 82.4 | 82.8 | 80.5 | 82.9 | 82.8 | 82.8 | 82.7 | 82.7 | 82.6 | 81.7 | 81.7 | 82.0 | 82.0 | 82.6 | 82.8 | 83.1 | 82.6 | 82.1 | 82.1 |
| MK182568//BH171/14-15 | Morelia viridis | 92.0 | 95.7 | 95.9 | 100.0 |   | 100.0 | 99.8 | 97.7 | 96.2 | 87.8 | 82.6 | 82.6 | 82.4 | 82.6 | 82.7 | 82.6 | 82.5 | 82.4 | 82.8 | 82.4 | 82.8 | 80.5 | 82.9 | 82.8 | 82.8 | 82.7 | 82.7 | 82.6 | 81.7 | 81.7 | 82.0 | 82.0 | 82.6 | 82.8 | 83.1 | 82.6 | 82.1 | 82.1 |
| MK182569//BH171/14-7 | Morelia viridis | 92.0 | 95.7 | 95.9 | 100.0 | 100.0 |   | 99.8 | 97.7 | 96.2 | 87.8 | 82.6 | 82.6 | 82.4 | 82.6 | 82.7 | 82.6 | 82.5 | 82.4 | 82.8 | 82.4 | 82.8 | 80.5 | 82.9 | 82.8 | 82.8 | 82.7 | 82.7 | 82.6 | 81.7 | 81.7 | 82.0 | 82.0 | 82.6 | 82.8 | 83.1 | 82.6 | 82.1 | 82.1 |
| MK182571//BH171/14-22 | Morelia viridis | 91.9 | 95.6 | 95.9 | 99.8 | 99.8 | 99.8 |   | 97.6 | 96.0 | 87.6 | 82.4 | 82.4 | 82.1 | 82.4 | 82.5 | 82.4 | 82.2 | 82.1 | 82.6 | 82.1 | 82.6 | 80.3 | 82.7 | 82.6 | 82.6 | 82.5 | 82.5 | 82.4 | 81.4 | 81.4 | 81.9 | 81.9 | 82.4 | 82.6 | 82.9 | 82.4 | 81.9 | 81.9 |
| MK182565//BH128/14-9 | Morelia viridis | 91.1 | 94.8 | 94.7 | 97.7 | 97.7 | 97.7 | 97.6 |   | 95.7 | 87.1 | 83.7 | 83.7 | 83.8 | 84.0 | 83.9 | 84.2 | 84.0 | 83.9 | 83.7 | 83.7 | 84.3 | 81.9 | 84.5 | 84.4 | 84.4 | 84.3 | 84.3 | 84.2 | 82.8 | 83.0 | 82.5 | 82.5 | 82.6 | 83.0 | 83.4 | 82.8 | 82.4 | 82.4 |
| MK182566//BH128/14-12 | Morelia viridis | 90.0 | 93.7 | 93.3 | 96.2 | 96.2 | 96.2 | 96.0 | 95.7 |   | 87.9 | 85.0 | 85.0 | 85.4 | 85.6 | 85.6 | 85.6 | 85.5 | 85.4 | 85.6 | 85.4 | 85.7 | 83.5 | 85.9 | 85.7 | 85.7 | 85.6 | 85.5 | 85.4 | 84.2 | 84.2 | 83.6 | 83.6 | 83.6 | 83.9 | 84.3 | 83.9 | 83.5 | 83.5 |
| MK182570//BH171/14-16 | Morelia viridis | 86.2 | 88.2 | 88.3 | 87.8 | 87.8 | 87.8 | 87.6 | 87.1 | 87.9 |   | 82.4 | 82.4 | 82.0 | 82.0 | 82.4 | 82.4 | 82.2 | 82.6 | 83.0 | 82.8 | 82.8 | 80.8 | 82.8 | 83.0 | 83.0 | 83.1 | 82.8 | 82.7 | 82.0 | 82.2 | 81.4 | 81.2 | 82.1 | 81.6 | 82.7 | 81.9 | 81.2 | 81.2 |
| MK182536//BH057/17-4 | Morelia viridis | 80.2 | 82.5 | 81.4 | 82.6 | 82.6 | 82.6 | 82.4 | 83.7 | 85.0 | 82.4 |   | 99.5 | 95.1 | 94.8 | 94.8 | 95.1 | 95.0 | 95.5 | 94.9 | 94.7 | 95.1 | 93.0 | 94.7 | 94.5 | 94.5 | 94.6 | 94.2 | 94.1 | 93.7 | 94.1 | 88.8 | 88.3 | 87.4 | 87.0 | 86.9 | 86.2 | 86.0 | 86.0 |
| MK182537//BH057/17-5 | Morelia viridis | 80.1 | 82.5 | 81.4 | 82.6 | 82.6 | 82.6 | 82.4 | 83.7 | 85.0 | 82.4 | 99.5 |   | 95.4 | 95.0 | 95.0 | 95.4 | 95.2 | 95.7 | 95.1 | 94.9 | 95.4 | 93.2 | 94.7 | 94.5 | 94.5 | 94.6 | 94.2 | 94.1 | 93.9 | 94.3 | 89.0 | 88.6 | 87.4 | 87.0 | 86.9 | 86.2 | 86.0 | 86.0 |
| MK182548//BH086/17-1 | Morelia viridis | 80.2 | 83.0 | 82.2 | 82.4 | 82.4 | 82.4 | 82.1 | 83.8 | 85.4 | 82.0 | 95.1 | 95.4 |   | 99.2 | 98.5 | 98.9 | 98.8 | 98.8 | 98.2 | 98.0 | 95.7 | 95.4 | 94.5 | 94.0 | 94.0 | 93.9 | 94.0 | 93.9 | 94.5 | 94.5 | 88.9 | 88.5 | 87.7 | 87.0 | 87.1 | 86.7 | 86.7 | 86.4 |
| MK182561//BH086/17-17 | Morelia spilota | 80.2 | 83.0 | 82.2 | 82.6 | 82.6 | 82.6 | 82.4 | 84.0 | 85.6 | 82.0 | 94.8 | 95.0 | 99.2 |   | 98.6 | 99.0 | 98.9 | 98.9 | 98.3 | 97.9 | 95.6 | 95.7 | 94.6 | 94.1 | 94.1 | 94.0 | 94.1 | 94.0 | 94.3 | 94.3 | 88.8 | 88.3 | 87.1 | 86.7 | 87.0 | 86.5 | 86.5 | 86.3 |
| MK182549//BH086/17-3 | Morelia spilota | 80.7 | 83.4 | 82.6 | 82.7 | 82.7 | 82.7 | 82.5 | 83.9 | 85.6 | 82.4 | 94.8 | 95.0 | 98.5 | 98.6 |   | 99.0 | 98.9 | 98.6 | 98.8 | 99.0 | 95.8 | 95.7 | 94.8 | 94.3 | 94.3 | 94.2 | 94.3 | 94.2 | 95.0 | 95.0 | 89.3 | 88.8 | 87.9 | 87.3 | 87.4 | 87.2 | 87.2 | 87.0 |
| MK182550//BH086/17-4 | Morelia spilota | 80.5 | 83.3 | 82.5 | 82.6 | 82.6 | 82.6 | 82.4 | 84.2 | 85.6 | 82.4 | 95.1 | 95.4 | 98.9 | 99.0 | 99.0 |   | 99.9 | 99.4 | 99.1 | 98.2 | 96.5 | 95.8 | 95.1 | 94.7 | 94.7 | 94.6 | 94.7 | 94.6 | 94.9 | 94.9 | 89.3 | 88.8 | 87.8 | 87.4 | 87.6 | 87.1 | 87.1 | 86.9 |
| MK182556//BH086/17-11 | Morelia spilota | 80.4 | 83.1 | 82.4 | 82.5 | 82.5 | 82.5 | 82.2 | 84.0 | 85.5 | 82.2 | 95.0 | 95.2 | 98.8 | 98.9 | 98.9 | 99.9 |   | 99.3 | 99.0 | 98.1 | 96.4 | 95.7 | 95.0 | 94.6 | 94.6 | 94.5 | 94.6 | 94.5 | 94.8 | 94.8 | 89.1 | 88.7 | 87.7 | 87.3 | 87.4 | 87.0 | 87.0 | 86.8 |
| MK182552//BH086/17-6 | Morelia spilota | 80.5 | 83.0 | 82.2 | 82.4 | 82.4 | 82.4 | 82.1 | 83.9 | 85.4 | 82.6 | 95.5 | 95.7 | 98.8 | 98.9 | 98.6 | 99.4 | 99.3 |   | 98.5 | 98.5 | 96.2 | 96.2 | 95.0 | 94.8 | 94.8 | 94.7 | 94.8 | 94.7 | 94.8 | 94.8 | 88.8 | 88.3 | 87.8 | 87.2 | 87.6 | 87.1 | 87.1 | 86.9 |
| MK182555//BH086/17-9 | Morelia spilota | 80.7 | 83.3 | 82.5 | 82.8 | 82.8 | 82.8 | 82.6 | 83.7 | 85.6 | 83.0 | 94.9 | 95.1 | 98.2 | 98.3 | 98.8 | 99.1 | 99.0 | 98.5 |   | 98.4 | 95.9 | 95.6 | 94.7 | 94.2 | 94.2 | 94.3 | 94.2 | 94.1 | 95.1 | 94.9 | 89.7 | 89.3 | 88.3 | 88.0 | 88.1 | 87.4 | 87.4 | 87.2 |
| MK182557//BH086/17-12 | Morelia spilota | 80.4 | 83.0 | 82.2 | 82.4 | 82.4 | 82.4 | 82.1 | 83.7 | 85.4 | 82.8 | 94.7 | 94.9 | 98.0 | 97.9 | 99.0 | 98.2 | 98.1 | 98.5 | 98.4 |   | 95.5 | 95.4 | 94.7 | 94.5 | 94.5 | 94.3 | 94.5 | 94.3 | 94.5 | 94.5 | 88.7 | 88.2 | 87.8 | 87.3 | 87.4 | 87.2 | 87.2 | 87.0 |
| MK182572//BH171/14-26 | Morelia viridis | 80.5 | 83.4 | 82.8 | 82.8 | 82.8 | 82.8 | 82.6 | 84.3 | 85.7 | 82.8 | 95.1 | 95.4 | 95.7 | 95.6 | 95.8 | 96.5 | 96.4 | 96.2 | 95.9 | 95.5 |   | 94.1 | 95.1 | 94.9 | 94.9 | 94.8 | 94.7 | 94.6 | 94.2 | 94.7 | 90.6 | 90.2 | 88.7 | 88.2 | 88.1 | 87.4 | 87.4 | 87.2 |
| MK182553//BH086/17-7 | Morelia spilota | 79.3 | 81.7 | 80.5 | 80.5 | 80.5 | 80.5 | 80.3 | 81.9 | 83.5 | 80.8 | 93.0 | 93.2 | 95.4 | 95.7 | 95.7 | 95.8 | 95.7 | 96.2 | 95.6 | 95.4 | 94.1 |   | 93.4 | 93.2 | 93.2 | 93.1 | 93.2 | 93.1 | 94.5 | 94.0 | 88.2 | 87.7 | 86.4 | 86.0 | 86.3 | 85.9 | 85.6 | 85.6 |
| MK182554//BH086/17-8 | Morelia spilota | 80.7 | 83.5 | 82.7 | 82.9 | 82.9 | 82.9 | 82.7 | 84.5 | 85.9 | 82.8 | 94.7 | 94.7 | 94.5 | 94.6 | 94.8 | 95.1 | 95.0 | 95.0 | 94.7 | 94.7 | 95.1 | 93.4 |   | 99.5 | 99.5 | 99.4 | 99.3 | 99.2 | 93.7 | 94.6 | 88.7 | 88.2 | 87.4 | 87.1 | 87.0 | 86.8 | 86.3 | 86.3 |
| MK182558//BH086/17-13 | Morelia spilota | 80.9 | 83.4 | 82.8 | 82.8 | 82.8 | 82.8 | 82.6 | 84.4 | 85.7 | 83.0 | 94.5 | 94.5 | 94.0 | 94.1 | 94.3 | 94.7 | 94.6 | 94.8 | 94.2 | 94.5 | 94.9 | 93.2 | 99.5 |   | 100.0 | 99.9 | 99.7 | 99.5 | 93.8 | 94.6 | 88.6 | 88.1 | 87.3 | 87.0 | 86.9 | 86.7 | 86.2 | 86.2 |
| MK182560//BH086/17-16 | Morelia spilota | 80.9 | 83.4 | 82.8 | 82.8 | 82.8 | 82.8 | 82.6 | 84.4 | 85.7 | 83.0 | 94.5 | 94.5 | 94.0 | 94.1 | 94.3 | 94.7 | 94.6 | 94.8 | 94.2 | 94.5 | 94.9 | 93.2 | 99.5 | 100.0 |   | 99.9 | 99.7 | 99.5 | 93.8 | 94.6 | 88.6 | 88.1 | 87.3 | 87.0 | 86.9 | 86.7 | 86.2 | 86.2 |
| MK182562//BH086/17-18 | Morelia spilota | 81.0 | 83.3 | 82.7 | 82.7 | 82.7 | 82.7 | 82.5 | 84.3 | 85.6 | 83.1 | 94.6 | 94.6 | 93.9 | 94.0 | 94.2 | 94.6 | 94.5 | 94.7 | 94.3 | 94.3 | 94.8 | 93.1 | 99.4 | 99.9 | 99.9 |   | 99.5 | 99.4 | 93.9 | 94.7 | 88.7 | 88.2 | 87.4 | 87.1 | 87.0 | 86.5 | 86.1 | 86.1 |
| MK182559//BH086/17-14 | Morelia spilota | 80.8 | 83.3 | 82.7 | 82.7 | 82.7 | 82.7 | 82.5 | 84.3 | 85.5 | 82.8 | 94.2 | 94.2 | 94.0 | 94.1 | 94.3 | 94.7 | 94.6 | 94.8 | 94.2 | 94.5 | 94.7 | 93.2 | 99.3 | 99.7 | 99.7 | 99.5 |   | 99.9 | 93.7 | 94.3 | 88.3 | 87.9 | 87.1 | 86.8 | 86.7 | 86.4 | 86.0 | 86.0 |
| MK182563//BH086/17-19 | Morelia spilota | 80.7 | 83.1 | 82.6 | 82.6 | 82.6 | 82.6 | 82.4 | 84.2 | 85.4 | 82.7 | 94.1 | 94.1 | 93.9 | 94.0 | 94.2 | 94.6 | 94.5 | 94.7 | 94.1 | 94.3 | 94.6 | 93.1 | 99.2 | 99.5 | 99.5 | 99.4 | 99.9 |   | 93.8 | 94.5 | 88.2 | 87.8 | 87.0 | 86.7 | 86.5 | 86.3 | 85.9 | 85.9 |
| MK182551//BH086/17-5 | Morelia spilota | 80.2 | 82.5 | 81.8 | 81.7 | 81.7 | 81.7 | 81.4 | 82.8 | 84.2 | 82.0 | 93.7 | 93.9 | 94.5 | 94.3 | 95.0 | 94.9 | 94.8 | 94.8 | 95.1 | 94.5 | 94.2 | 94.5 | 93.7 | 93.8 | 93.8 | 93.9 | 93.7 | 93.8 |   | 98.9 | 88.8 | 88.3 | 86.5 | 86.5 | 86.4 | 86.0 | 85.7 | 86.0 |
| MK182564//BH086/17-20 | Morelia spilota | 80.4 | 82.7 | 82.0 | 81.7 | 81.7 | 81.7 | 81.4 | 83.0 | 84.2 | 82.2 | 94.1 | 94.3 | 94.5 | 94.3 | 95.0 | 94.9 | 94.8 | 94.8 | 94.9 | 94.5 | 94.7 | 94.0 | 94.6 | 94.6 | 94.6 | 94.7 | 94.3 | 94.5 | 98.9 |   | 88.6 | 88.1 | 86.3 | 86.3 | 86.2 | 85.7 | 85.5 | 85.7 |
| MK182539//BH057/17-11 | Morelia viridis | 80.0 | 82.8 | 82.2 | 82.0 | 82.0 | 82.0 | 81.9 | 82.5 | 83.6 | 81.4 | 88.8 | 89.0 | 88.9 | 88.8 | 89.3 | 89.3 | 89.1 | 88.8 | 89.7 | 88.7 | 90.6 | 88.2 | 88.7 | 88.6 | 88.6 | 88.7 | 88.3 | 88.2 | 88.8 | 88.6 |   | 99.2 | 94.0 | 93.8 | 94.1 | 93.0 | 92.9 | 92.9 |
| MK182540//BH057/17-12 | Morelia viridis | 79.9 | 82.8 | 82.2 | 82.0 | 82.0 | 82.0 | 81.9 | 82.5 | 83.6 | 81.2 | 88.3 | 88.6 | 88.5 | 88.3 | 88.8 | 88.8 | 88.7 | 88.3 | 89.3 | 88.2 | 90.2 | 87.7 | 88.2 | 88.1 | 88.1 | 88.2 | 87.9 | 87.8 | 88.3 | 88.1 | 99.2 |   | 93.9 | 93.4 | 93.8 | 92.6 | 92.5 | 92.5 |
| MK182541//BH057/17-14 | Python molurus | 80.2 | 83.3 | 82.9 | 82.6 | 82.6 | 82.6 | 82.4 | 82.6 | 83.6 | 82.1 | 87.4 | 87.4 | 87.7 | 87.1 | 87.9 | 87.8 | 87.7 | 87.8 | 88.3 | 87.8 | 88.7 | 86.4 | 87.4 | 87.3 | 87.3 | 87.4 | 87.1 | 87.0 | 86.5 | 86.3 | 94.0 | 93.9 |   | 94.8 | 95.8 | 94.6 | 94.5 | 94.5 |
| MK182543//BH057/17-15 | Python molurus | 79.9 | 82.7 | 82.4 | 82.8 | 82.8 | 82.8 | 82.6 | 83.0 | 83.9 | 81.6 | 87.0 | 87.0 | 87.0 | 86.7 | 87.3 | 87.4 | 87.3 | 87.2 | 88.0 | 87.3 | 88.2 | 86.0 | 87.1 | 87.0 | 87.0 | 87.1 | 86.8 | 86.7 | 86.5 | 86.3 | 93.8 | 93.4 | 94.8 |   | 98.5 | 98.0 | 97.9 | 97.9 |
| MK182542//BH057/17-16 | Python molurus | 80.3 | 83.1 | 82.8 | 83.1 | 83.1 | 83.1 | 82.9 | 83.4 | 84.3 | 82.7 | 86.9 | 86.9 | 87.1 | 87.0 | 87.4 | 87.6 | 87.4 | 87.6 | 88.1 | 87.4 | 88.1 | 86.3 | 87.0 | 86.9 | 86.9 | 87.0 | 86.7 | 86.5 | 86.4 | 86.2 | 94.1 | 93.8 | 95.8 | 98.5 |   | 98.3 | 97.7 | 97.7 |
| MK182544//BH057/17-17 | Morelia spilota | 79.6 | 82.7 | 82.1 | 82.6 | 82.6 | 82.6 | 82.4 | 82.8 | 83.9 | 81.9 | 86.2 | 86.2 | 86.7 | 86.5 | 87.2 | 87.1 | 87.0 | 87.1 | 87.4 | 87.2 | 87.4 | 85.9 | 86.8 | 86.7 | 86.7 | 86.5 | 86.4 | 86.3 | 86.0 | 85.7 | 93.0 | 92.6 | 94.6 | 98.0 | 98.3 |   | 99.2 | 99.2 |
| MK182545//BH057/17-18 | Morelia spilota | 79.4 | 82.7 | 82.1 | 82.1 | 82.1 | 82.1 | 81.9 | 82.4 | 83.5 | 81.2 | 86.0 | 86.0 | 86.7 | 86.5 | 87.2 | 87.1 | 87.0 | 87.1 | 87.4 | 87.2 | 87.4 | 85.6 | 86.3 | 86.2 | 86.2 | 86.1 | 86.0 | 85.9 | 85.7 | 85.5 | 92.9 | 92.5 | 94.5 | 97.9 | 97.7 | 99.2 |   | 99.8 |
| MK182546//BH057/17-20 | Morelia spilota | 79.4 | 82.7 | 82.1 | 82.1 | 82.1 | 82.1 | 81.9 | 82.4 | 83.5 | 81.2 | 86.0 | 86.0 | 86.4 | 86.3 | 87.0 | 86.9 | 86.8 | 86.9 | 87.2 | 87.0 | 87.2 | 85.6 | 86.3 | 86.2 | 86.2 | 86.1 | 86.0 | 85.9 | 86.0 | 85.7 | 92.9 | 92.5 | 94.5 | 97.9 | 97.7 | 99.2 | 99.8 |   |

Figure S1: Genome organization of snake nidoviruses. Sequences marked in red were generated within this study.

