**Table S5.** significant recombination events detected by RDP4 among ranavirus core genes.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Event | Recombinant Sequence(s) | Major Parental Sequence(s) | Minor Parental Sequence(s) | Location | |  | Dectection methods | | | | | | | | |
| Begin | End |  | RDP | Geneconv | Bootscan | Maxchi | Chimaera | SiSscan | PhylPro | LARD | 3Seq |
| 1 | FV3-AY548484 | RCV-Z2-MF187209 | RCV-Z-MF187210 | 18929 | 23747 |  | + | + | + | + | + | + | - | - | + |
| 2 | RCV-Z2-MF187209 | FV3-AY548484 | RCV-Z-MF187210 | 35710 | 39014 |  | + | + | + | + | + | + | - | - | + |
| 3 | TMRV02-MG953520 | FV3-KJ175144 | RCV-Z-MF187210 | 57949 | 59019 |  | + | + | + | + | + | + | - | - | - |
| 4 | EHNV-FJ433873 | Unknown (PPIV-KX574341) | RGV-JQ654586 | 57251 | 57499 |  | + | + | + | + | + | + | - | - | - |
| 5 | CGSIV-KF512820 | PEV-MF538627 | GGRV-KP266742 | 57252 | 57574 |  | + | + | + | + | + | + | - | - | - |
| 6 | RCV-Z2-MF187209 | FV3-KJ175144 | RCV-Z-MF187210 | 31594 | 34180 |  | + | + | + | + | + | - | - | - | - |
| 7 | TFV-AF389451 | PEV-MF538627 | CoIV-KX574342 | 57421 | 57597 |  | + | + | + | + | + | + | - | - | - |
| 8 | ESV-JQ724856 | Unknown (CH8/96-KP266741) | REV-MF538628 | 38160 | 38543 |  | + | + | + | + | + | - | - | - | - |
| 9 | CGSIV-KF512820 | RCV-Z-MF187210 | STIV-EU627010 | 58154 | 58954 |  | + | + | + | + | + | - | - | - | - |
| 10 | CoIV-KX574342 | Rmax-KX574343 | Unknown (ToRV-KP266743) | 8354 | 8582 |  | + | + | + | + | - | - | - | - | - |
| 11 | CMTV-JQ231222 | PEV-MF538627 | GGRV-KP266742 | 57252 | 57600 |  | + | + | + | + | + | + | - | - | - |
| 12 | Rmax-KX574343 | ESV-JQ724856 | Unknown (GGRV-KP266742) | 42597 | 43876 |  | + | + | + | + | + | + | - | - | - |
| 13 | ESV-JQ724856 | Rmax-KX574343 | SERV-KX353311 | 8145 | 8396 |  | + | + | + | - | + | + | - | - | - |
| 14 | REV-MF538628 | RCV-Z-MF187210 | SERV-KX353311 | 38460 | 38640 |  | + | + | + | - | - | + | - | - | - |
| 15 | EHNV-FJ433873 | ESV-JQ724856 | SERV-KX353311 | 33040 | 33124 |  | + | + | + | + | + | + | - | - | - |
| 16 | CGSIV-KF512820 | RCV-Z-MF187210 | STIV-EU627010 | 47378 | 48383 |  | + | + | + | + | - | - | - | - | - |
| 17 | SERV-KX353311 | Unknown | RGV-JQ654586 | 8198 | 8713 |  | + | + | + | - | - | - | - | - | - |
| 18 | CoIV-KX574342 | EHNV-FJ433873 | Unknown (TFV-AF389451) | 49350 | 50897 |  | + | + | + | + | + | + | - | - | - |
| 19 | CH8/96-KP266741 | PEV-MF538627 | Unknown (ZRV-MK227779) | 57252 | 57600 |  | + | + | + | + | + | + | - | - | - |
| 20 | FV3-KJ175144 | STIV-EU627010 | Unknown (ToRV-KP266743) | 8169 | 8690 |  | + | + | + | - | - | + | - | - | - |
| 21 | FV3-KJ175144 | STIV-EU627010 | RCV-Z-MF187210 | 18615 | 20386 |  | + | + | + | + | + | - | - | - | - |
| 22 | TMRV02-MG953520 | STIV-EU627010 | RCV-Z-MF187210 | 43091 | 43854 |  | + | + | + | + | + | - | - | - | - |
| 23 | RGV-JQ654586 | RNRV-MG791866 | RCV-Z2-MF187209 | 44451 | 46962 |  | + | + | + | - | + | - | - | - | - |
| 24 | BIV-KX185156 | FV3-AY548484 | SERV-KX353311 | 22190 | 22302 |  | + | + | + | - | - | - | - | - | - |
| 25 | EHNV-FJ433873 | ESV-JQ724856 | Unknown (ToRV-KP266743) | 21420 | 21626 |  | + | + | + | + | + | + | - | - | - |
| 26 | ESV-JQ724856 | RCV-Z2-MF187209 | SERV-KX353311 | 7944 | 8144 |  | + | - | + | - | - | - | - | - | - |
| 27 | RNRV-MG791866 | TMRV02-MG953520 | Unknown (CH8/96-KP266741) | 22334 | 23626 |  | + | - | + | - | - | - | - | - | - |
| 28 | TMRV02-MG953520 | STIV-EU627010 | CGSIV-KF512820 | 36034 | 37425 |  | + | - | + | + | - | + | - | - | - |
| 29 | RCV-Z2-MF187209 | FV3-AY548484 | CGSIV-KF512820 | 53810 | 54768 |  | + | - | + | - | - | - | - | - | - |
| 30 | ToRV-KP266743 | Unknown (REV-MF538628) | STIV-EU627010 | 42365 | 43931 |  | + | - | + | - | - | - | - | - | - |
| 31 | PEV-MF538627 | Unknown (FV3-KJ175144) | GGRV-KP266742 | 57445 | 57490 |  | + | + | - | - | - | - | - | - | - |
| 32 | PEV-MF538627 | CH8/96-KP266741 | Unknown (FV3-KJ175144) | 22300 | 23626 |  | + | - | + | - | - | - | - | - | - |
| 33 | RCV-Z2-MF187209 | STIV-EU627010 | RCV-Z-MF187210 | 46963 | 47607 |  | + | - | + | - | - | - | - | - | - |
| 34 | CGSIV-KF512820 | REV-MF538628 | RGV-JQ654586 | 41177 | 42458 |  | + | - | + | - | - | - | - | - | - |
| 35 | EHNV-FJ433873 | ESV-JQ724856 | TFV-AF389451 | 57598 | 58092 |  | + | - | - | - | - | - | - | - | - |
| 36 | CMTV-JQ231222 | REV-MF538628 | BIV-KX185156 | 42579 | 43937 |  | + | - | + | - | - | - | - | - | - |
| 37 | RNRV-MG791866 | FV3-AY548484 | PEV-MF538627 | 45025 | 46224 |  | + | - | - | - | - | - | - | - | - |
| 38 | ESV-JQ724856 | RGV-JQ654586 | Unknown (SERV-KX353311) | 57496 | 57730 |  | + | - | - | - | - | - | - | - | - |