**Appendix Table 2.** VR2 sequence nomenclature[a]

| Variant | Previous nomenclature | VR2 peptide sequence | Source or reference |
|---|---|---|---|
| 1 | 1 | YVAVENGVAKKVA | (1) |
| 1–1 | 1a | YVAVENGATKKVA | (6) |
| 1–2 | 1b | YVAVENGVVKKVA | This study |
| 1–3 | 1c | YVAVENGVAKKVT | WS |
| 2 | 2 | HFVQQTPKSQPTLVP | (1) |
| - | 2a | found to be 2e | (1) |
| 2–1 | 2b | HFVQQPPKSQPTLVP | (10) |
| 2–2 | 2c | HFVQQTPQSQPTLVP | (3) |
| Removed | 2d | HFVQETPKSQPTLVP | (4) |
| 2–3 | 2e | HFVQQPPKSQLTLVP | This study |
| 2–4 | 2f | HFVQQTPQSRPTLVP | This study |
| 2–5 | 2g | HFVQQIPQSQPTLVP | WS |
| 2–6 | 2i | HFVQQTPTLVP | (6) |
| 2–7 | - | HFVQQTSKSQPTLVP | WS |
| 2–8 | - | HFVQQTTKSQPTLVP | WS |
| 2–9 | - | HFVQQTPQSKPTLVP | WS |
| 2–10 | - | HFVQQAPQSQSTLVP | WS |
| 2–11 | - | HFVLQTPQSQPTLVP | WS |
| 2–12 | - | HFVQQIPKSQPTLVP | WS |
| 2–13 | - | YFVQQTPQSQPTLVP | GenBank AF239810 |
| 2–14 | 33 | HFVQQKLASKPTLVP | WS |
| 2–15 | 33a | HFVQQKSTSKPTLVP | WS |
| 2–16 | 33b | HFVQQKPTSKPTLVP | WS |
| 2–17 | 33c | HFVQQQPTSEPTLVP | WS |
| 2–18 | - | HFVQQIPKSQPILVP | WS |
| 2–19 | - | HFVQQTSQSQPTLVP | WS |
| 2–20 | - | HFVQQTPIVQQTPKSQPTLVP | WS |
| 3 | 3 | TLANGANNTIIRVP | (3) |
| 3–1 | 3a | TVANGANNTIIRVP | (14) |
| 3–2 | 3b | TLANGANDTIIRVP | This study |
| 3–3 | - | TLANGADNTIIRVP | WS |
| 3–4 | - | TPANGANNTIIRVP | WS |
| 3–5 | - | TLAKGANNTIIRVP | WS |
| 4 | 4 | HVVVNNKVATHVP | (13) |
| 4–1 | 4a | HVVVNNNVATHVP | (8) |
| 4–2 | 4b | HVVVNNKVATHVPAKVATHVP | This study |
| 4–3 | 4c | HVVVNNKVTTHVP | WS |
| 9 | 9 | YVDEQSKYHA | (1) |
| 9–1 | 9a | YVDSKYHA | GenBank AF148643 |
| 9–2 | - | YVGEQSKYHA | WS |
| 9–3 | - | YVDEQSKDHA | WS |
| 9–4 | - | YVDKQSKYHA | WS |
| 9–5 | - | YVDEQSEYHA | WS |
| 10 | 10 | HFVQNKQNQRPTLVP | (3) |
| 10–1 | 10a | HFVQNKQNQPPTLVP | (10,15) |

| | | | |
|---|---|---|---|
| 10–2 | 10b | HFVQDKKGQPPTLVP | (10,15) |
| 10–3 | 10c | HFVQNKQNQQPTLVP | (10,15) |
| 10–4 | 10d | HFVQNKQNKQNQPPTLVP | (10,15) |
| 10–5 | 10e | HFVQNKQSQRPTLVP | (3) |
| 10–6 | 10f | HFVQNKQNQQNQQNQPPTLVP | (10,15) |
| 10–7 | 10g | HFVQNKQNKPPTLVP | (10,15) |
| Removed | 10h | | (4) |
| Removed | 10i | | (4) |
| Removed | 10j | | (4) |
| 10–8 | 10k | HFVQNKQNQQNQPPTLVP | This study |
| 10–9 | 10l | HFVQNKQNKQNQLPTLVP | This study |
| 10–10 | 10m | HFVQNKQNKQNKQNQPPTLVP | This study |
| 10–11 | 10n | HFVQNKQNQRSTLVP | This study |
| 10–12 | 10o | HFVQNKQNQLPTLVP | GenBank AF182278 |
| 10–13 | 10p | HFVQNKQNKKNQPPTLVP | WS |
| 10–14 | 10q | HFVQNKQHQPPTLVP | WS |
| 10–15 | 10r | HFVQNKQNQPSTLVP | WS |
| 10–16 | 10s | HFVQNKQNQWSTLVP | WS |
| 10–17 | 10t | HFVQNKQNQTPTLVP | WS |
| 10–18 | 10u | HFVQNKQSQPPTLVP | WS |
| 10–19 | 10w | HFVQNKQNKQKQPPTLVP | (6) |
| 10–20 | 10i,10v | HFVQNKQNQWLTLVP | GenBank AF162346 |
| 10–21 | 10x | HFVPDKKGQPPTLVP | (6) |
| 10–22 | 10y | HFVQNKQNKQNQQNQPPTLVP | WS |
| 10–23 | - | HFVQNKQNQWPTLVP | WS |
| 10–24 | - | HFVKNKQNQRPTLVP | (6) |
| 10–25 | - | HFVQDKKGQP | WS |
| 13 | 13 | YWTTVNTGSATTTTTFVP | (16) |
| 13–1 | 13a | YWTTVNTGSATTTTFVP | (3) |
| 13–2 | 13b | YWTTVNTGSATTTFVP | (16) |
| 13–3 | 13c | YWTTVNTGSATITTFVP | (10) |
| 13–4 | 13d | YYTTVTQGSATTTTFVP | (10) |
| 13–5 | 13e | YWTTVNTGSATTTTTTTTTFVP | (16) |
| 13–6 | 13f | YWTTVNTGSATTTTTTTTFVP | (5) |
| 13–7 | 13g | YWTTVNTGSATTTTTTFVP | (5) |
| 13–8 | 13h | YWITVNTGSATTTTFVP | (16) |
| 13–9 | 13i | YWTTVNTGSATTFVP | This study |
| 13–10 | 13j | YWTTVNTGSVTTTTFVP | WS |
| 13–11 | 13k | YWTTVNTGSAATTTTFVP | This study |
| 13–12 | - | YWTAVNAGSATTTFVP | WS |
| 14 | 14 | YVDEKKMVHA | (13) |
| 14–1 | 14a | YVDEKKKMVHA | (8) |
| 14–2 | 14b | YVDEKKKVHA | (17) |
| 14–3 | 14c | YVDEKNMVHA | (17) |
| 14–4 | 14d | YVDENKMVHA | (11) |
| 14–5 | 14e | YVDKEQVSHA | This study |
| 14–6 | 14f | YVDEKQVSHA | This study |
| 14–7 | 14g | YVDETKMVHA | WS |
| 14–8 | - | YVDEKRMVHA | WS |
| 14–9 | - | YVDAKKMVHA | WS |
| 15 | 15 | HYTRQNNADVFVP | (1) |
| 15–1 | 15a | HYTRQNNTDVFVP | (7) |

| | | | |
|---|---|---|---|
| 15–2 | 15c | HYTRQNNNNTDVFVP | This study |
| 15–3 | 15d | HYTRPNNTDVFVP | (11) |
| 15–4 | 15e | HYNTRQNNADVFVP | WS |
| 15–5 | 15f | HYTRQNSADVFVP | This study |
| 15–6 | 15g | HYTRQNYADVFVP | WS |
| 15–7 | 15h | HYTRQNNANVFVP | (6) |
| 15–8 | - | HYTRQNNAGVFVP | (12) |
| 15–9 | - | HYTRQNNTRQNNADVFVP | (12) |
| 15–10 | - | HYTGQNNADVFVP | (12) |
| 15–11 | 15b | HYTRQNNIDVFVP | (10) |
| 15–12 | - | HYNTRQNNIDVFVP | WS |
| 15–13 | - | HYTRQNNQNNIDVFVP | WS |
| 15–14 | - | HYTNTRQNNIDVFVP | WS |
| 15–15 | - | HYTRQSNTDVFVP | WS |
| 15–16 | - | HYTRQNNADFVP | WS |
| 16 | 16 | YYTKDTNNNLTLVP | (1) |
| 16–1 | 16w | YYTKGKNNALTLVP | WS |
| 16–2 | 16b | YYTKNTNNNLTLVP | (18) |
| 16–3 | 16c | YYTKDKNDNLTLVP | (5) |
| 16–4 | 16d | YYTKDKNDKLTLVP | (5) |
| 16–5 | 16e | YYTKDTNNNNNLTLVP | (5) |
| 16–6 | 16f | YYTKHTNNNLTLVP | This study |
| 16–7 | 16g | YYTKDTNTKDTNNNLTLVP | This study |
| 16–8 | 16h | YYTKDKNNALTLVP | (6) |
| 16–9 | 16i | YYTKDTNDLTLVP | WS |
| 16–10 | 16j | YYTNNNLTLVP | This study |
| 16–11 | 16k | YYTTDTNNNLTLVP | This study |
| 16–12 | 16l | YYTKDTNDNLTLVP | This study |
| 16–13 | 16m | YYTEDTNNNLTLVP | WS |
| 16–14 | 16n | YYTKDTNTNLTLVP | WS |
| 16–15 | 16p | YYNTKDTNNNLTLVP | This study |
| 16–16 | 16q | YYTKDTNNNPTLVP | This study |
| 16–17 | 16r | YYTKDTNNTNNNLTLVP | (6) |
| 16–18 | 16s | YYTKDTNTNNNLTLVP | GenBank AF143744 |
| 16–19 | 16t | YYTKDTNNNLTHTKDTNNNLTLVP | (6) |
| 16–20 | 16u | KDTNNNLTLVP | (6) |
| 16–21 | 16v | YYTKDTKNNLTLVP | (6) |
| 16–22 | - | YYTKDTNNILTLVP | WS |
| 16–23 | - | YYTKDNKNDNLTLVP | (6) |
| 16–24 | - | YYTKVENDNLTLVP | WS |
| 16–25 | - | YYTKDTNNNLNLTLVP | WS |
| 16–26 | - | YYTNTNNNLTLVP | WS |
| 16–27 | - | YYTKDTNNNLTLVS | WS |
| 23 | 23 | HWNTVYNTNGTTTTFVP | (3) |
| 23–1 | 23a | HWNTVYNTNGTTTTTTTFVP | (6) |
| 23–2 | - | HWNTVYNTNGTTTTTFVP | WS |
| Removed | 24 | TLANVANTNIGVP | (13) |
| 25 | 25 | TYTVDSSGVVTPVP | (1) |
| 25–1 | 25a | TYTVDSSGVFTPVP | This study |
| 25–2 | 25b | TYTEGSSGVFTPVP | WS |
| 25–3 | 25c | TYTVDSSGVVTPLP | WS |
| 25–4 | 25d | TYTVGSRDVVTPVP | GenBank AF162345 |

| | | | |
|---|---|---|---|
| 25–5 | 25e | TYTVDSSNVVTPVP | GenBank AF157834 |
| 25–6 | 25f | TYTVDSGVVTPVP | (6) |
| 25–7 | 25g | YTVDSSGVVTPVP | WS |
| 25–8 | - | TYTVDSSGVP | WS |
| 25–9 | - | TYTVDNSSVVTPVP | WS |
| 26 | 26 | HFVADSQGKITRVP | (10) |
| 26–1 | 26a | HFVADSQGEITRVP | GenBank AF146084 |
| 26–2 | - | YFTADPNDQNKITRVP | WS |
| 28 | 28 | YYYTTATNSSTSTTFVP | (10) |
| 30 | 30 | HYTTVYNATTTTTTFVP | WS |
| 30–1 | 30a | HYTTVYNATTTTTFVP | This study |
| 30–2 | 30b | HYTTVYNATTTTTTTFVP | (6) |
| 30–3 | 30c | HYTTVYNATTTTTTTTFVP | This study |
| 30–4 | 30d | HYTTVYNATTTTTTTTTFVP | WS |
| 30–5 | 30e | HYTTVYNATTTTTTTTTTFVP | WS |
| 34 | 34 | YVDDQGKVKGP | (6) |
| 34–1 | - | YVDDQKVKGP | WS |
| 35 | - | TFTLESNQMKPVP | WS |

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