## Reassortment of G11 Rotavirus Strains in Humans

Table 1. GenBank accession numbers of rotavirus gene segments sequenced in the present study*

| Gene | Dhaka6 | Dhaka22-01 | Matlab36-02 | KTM368 | YM | OSU | Gottfried |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VP1 | EF560705 | GU199478 | GU199503 | GU199492 | X76486 | GU199514 | M32805 |
| VP2 | GU199519 | GU199479 | GU199504 | GU199493 | GU199516 | GU199515 | GU199487 |
| VP3 | EF560706 | GU199480 | GU199505 | GU199494 | AY300922 | AY277921 | GU199488 |
| VP4 | GU199520 | DQ482725 | GU199506 | GU199495 | M63231 | X13190 | M33516 |
| VP6 | GU199521 | GU199481 | GU199507 | GU199496 | X69487 | AF317123 | D00326 |
| VP7 | AY773003 | DQ482712 | GU199508 | GU199497 | M23194 | X04613 | X06386 |
| NSP1 | GU199522 | GU199482 | GU199509 | GU199498 | D38154 | Z12107 | U08431 |
| NSP2 | EF560709 | GU199483 | GU199510 | GU199499 | GU199517 | X06722 | GU199489 |
| NSP3 | GU199523 | GU199484 | GU199511 | GU199500 | GU199518 | X81431 | X81430 |
| NSP4 | EF560711 | GU199485 | GU199512 | GU199501 | X69485 | D88831 | GU199490 |
| NSP5 | EF560712 | GU199486 | GU199513 | GU199502 | X69486 | X15519 | GU199491 |

*VP, structural protein; NSP, nonstructural protein. Numbers in boldface are accession numbers are from previous studies.

Table 2. Pairwise identities between partial nucleotide gene sequences of G11P[8] rotavirus strain Dhaka22-01 and other human G11 rotavirus strains (Matlab36-02, Dhaka6, and KTM368), human strains Dhaka16-03 (G1P[8]) and Dhaka12-03 (G12P[6]), and Belgian strain B4633-03 (G12P[8])*

| Gene and strain | Strains |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VP1 | Dhaka22_01 | Matlab36-02 | Dhaka6 | KTM368 | B4633-03 | Dhaka12-03 | Dhaka16-03 |
| Dhaka22_01 |  |  |  |  |  |  |  |
| Matlab36-02 | 97.1 |  |  |  |  |  |  |
| Dhaka6 | 97.1 | 96.3 |  |  |  |  |  |
| KTM368 | 86.6 | 87.2 | 86.4 |  |  |  |  |
| B4633-03 | 97.9 | 97.6 | 98.7 | 86.1 |  |  |  |
| Dhaka12-03 | 100 | 97.1 | 97.1 | 86.6 | 97.9 |  |  |
| Dhaka16-03 | 97.1 | 96.9 | 97.9 | 85.9 | 99.2 | 97.1 |  |
| Wa | 94.2 | 94 | 93.5 | 88.7 | 94.2 | 94.2 | 94 |
| VP2 |  |  |  |  |  |  |  |


| Dhaka22_01 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Matlab36-02 | 93.5 |  |  |  |  |  |  |
| Dhaka6 | 93.5 | 100 |  |  |  |  |  |
| KTM368 | 93.3 | 99.4 | 99.4 |  |  |  |  |
| B4633-03 | 95.1 | 94.6 | 94.6 | 94.4 |  |  |  |
| Dhaka12-03 | 98.9 | 93.8 | 93.8 | 93.5 | 94.8 |  |  |
| Dhaka16-03 | 98.7 | 93.5 | 93.5 | 93.3 | 95.1 | 98.5 |  |
| Wa | 91.4 | 92.7 | 92.7 | 92 | 91.6 | 91.2 | 9 |
| VP3 |  |  |  |  |  |  |  |


| Dhaka22_01 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Matlab36-02 | 86.3 |  |  |  |  |  |  |
| Dhaka6 | 86.3 | 99.6 |  |  |  |  |  |
| KTM368 | 86.7 | 99.2 | 98.8 |  |  |  |  |
| B4633-03 | 99 | 85.7 | 85.7 | 86.1 |  |  |  |
| Dhaka12-03 | 99.6 | 86.3 | 86.3 | 86.7 | 99 |  |  |
| Dhaka16-03 | 94.8 | 86.7 | 86.7 | 87.5 | 93.8 | 94.4 |  |
| Wa | 92.9 | 85.2 | 85.2 | 85.9 | 92.7 | 92.9 | 9.3 |


| VP4 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dhaka22_01 |  |  |  |  |  |  |  |
| Matlab36-02 | 98.4 |  |  |  |  |  |  |
| Dhaka6 | 58.5 | 58.4 |  |  |  |  |  |
| KTM368 | 58.4 | 58.3 | 99.5 |  |  |  |  |
| B4633-03 | 98 | 99.4 | 58.4 | 58.3 |  |  |  |
| Dhaka12-03 | 72.5 | 72.3 | 60.1 | 60 | 72.1 |  |  |
| Dhaka16-03 | 97.9 | 99.5 | 58.5 | 58.4 | 98.9 | 72.3 |  |
| Wa | 91.5 | 91.6 | 58.8 | 58.6 | 91.5 | 72.1 | 91.2 |
| VP6 |  |  |  |  |  |  |  |


| Dhaka22_01 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Matlab36-02 | 99 |  |  |  |  |  |  |
| Dhaka6 | 99.2 | 99.3 |  |  |  |  |  |
| KTM368 | 83.9 | 84.3 | 84.2 |  |  |  |  |
| B4633-03 | 97.5 | 97.1 | 97.2 | 84.2 |  |  |  |
| Dhaka12-03 | 98 | 98.2 | 98.3 | 84.2 | 97.1 |  |  |
| Dhaka16-03 | 98.3 | 98.2 | 98.3 | 83.9 | 97.3 | 99.4 |  |
| Wa | 90.5 | 90.5 | 90.3 | 83.5 | 91.2 | 90.2 | 90.2 |
| VP7 |  |  |  |  |  |  |  |


| Dhaka22_01 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Matlab36-02 | 99.8 |  |  |  |  |  |  |
| Dhaka6 | 99.5 | 99.7 |  |  |  |  |  |
| KTM368 | 99.7 | 99.5 | 99.8 |  |  |  |  |
| B4633-03 | 72.7 | 72.5 | 72.8 | 73 |  |  |  |
| Dhaka12-03 | 72.7 | 72.5 | 72.8 | 73 | 97.7 |  |  |
| Dhaka16-03 | 70.5 | 70.4 | 70.7 | 70.8 | 70.8 | 70.2 |  |
| Wa | 70.2 | 70.4 | 70.7 | 70.5 | 70.4 | 70.2 | 9.1 |
| NSP1 |  |  |  |  |  |  |  |



| Dhaka6 | 97.9 | 99.2 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| KTM368 | 99 | 98.6 | 98.2 |  |  |  |  |
| B4633-03 | 97.1 | 98 | 97.8 | 97.4 |  |  |  |
| Dhaka12-03 | 99.1 | 99 | 98.6 | 99.3 | 97.8 |  |  |
| Dhaka16-03 | 97.9 | 99.6 | 98.8 | 98.2 | 97.7 | 98.6 |  |
| Wa | 85.5 | 85.7 | 85.5 | 85.3 | 85.3 | 85.7 | 86.1 |
| NSP2 |  |  |  |  |  |  |  |


| Dhaka22_01 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Matlab36-02 | 99 |  |  |  |  |  |  |
| Dhaka6 | 98.8 | 99.6 |  |  |  |  |  |
| KTM368 | 88.1 | 88.1 | 88 |  |  |  |  |
| B4633-03 | 98.3 | 98.6 | 98.4 | 87.2 |  |  |  |
| Dhaka12-03 | 96.7 | 97.3 | 97.1 | 87.4 | 97.4 |  |  |
| Dhaka16-03 | 98.8 | 99.6 | 99.5 | 88 | 98.4 | 97.4 |  |
| Wa | 93.6 | 93.5 | 93.1 | 87.4 | 93.6 | 92.8 | 99.3 |
| NSP3 |  |  |  |  |  |  |  |


| Dhaka22_01 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Matlab36-02 | 97.6 |  |  |  |  |  |  |
| Dhaka6 | 97.7 | 99.3 |  |  |  |  |  |
| KTM368 | 92.5 | 92.5 | 92.9 |  |  |  |  |
| B4633-03 | 98.8 | 98 | 98.1 | 93.2 |  |  |  |
| Dhaka12-03 | 99.3 | 98 | 98.1 | 92.9 | 99.2 |  |  |
| Dhaka16-03 | 98 | 99.6 | 99.5 | 92.6 | 98.1 | 98.4 |  |
| Wa | 95.1 | 95.2 | 92.8 | 96 | 96 | 95.2 |  |
| NSP4 |  |  |  |  |  |  |  |


| Dhaka22_01 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Matlab36-02 | 100 |  |  |  |  |  |  |
| Dhaka6 | 99 | 99 |  |  |  |  |  |
| KTM368 | 87.8 | 87.8 | 87.8 |  |  |  |  |
| B4633-03 | 99 | 99 | 97.9 | 88.2 |  |  |  |
| Dhaka12-03 | 98.3 | 99.3 | 98.3 | 97.3 | 87.7 | 97.9 |  |
| Dhaka16-03 | 93.7 | 99.3 | 99.3 | 87.5 | 98.3 | 97.6 |  |
| Wa | 93.7 | 93 | 89 | 93 | 92.8 |  |  |
| NSP5 |  |  |  |  |  |  |  |


| Dhaka22_01 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Matlab36-02 | 99.5 |  |  |  |  |  |  |
| Dhaka6 | 98.6 | 98.1 |  |  |  |  |  |
| KTM368 | 94.5 | 94 | 95.6 |  |  |  |  |
| B4633-03 | 98.6 | 98.4 | 98.6 | 94.9 |  |  |  |


| Dhaka12-03 | 99.1 | 98.6 | 99.1 | 95.4 | 98.8 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Dhaka16-03 | 99.3 | 99.8 | 97.9 | 93.8 | 98.2 | 98.4 |  |
| Wa | 92.8 | 92.3 | 93.1 | 92.4 | 92.4 | 93.3 | 92.3 |

*Values are percentages. VP, structural protein; NSP, nonstructural protein. The following nucleotide regions were used for comparisons: VP1: 26224; VP2: 27-490; VP3: 303-797; VP4: 41-842; VP6: 42-755; VP7: 49-1010; NSP1: 19-737; NSP2: 41-770; NSP3: 35-771; NSP4: 62-732; NSP5: 38-645.

