**Supplementary Table S1:** Details of patients used in this study with age distribution, symptoms and serotype of the corresponding Dengue virus.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Patient ID** | **Age/Gender** | **Fever (Days)** | **Platelet (lac/cumm)** | **Dengue virus** | **Serotype** |
| 1 | 63/14 | 18 /M | 3 | 2 | ˗ve | - |
| 2 | 64/14 | 25/ M | 5 | 2.1 | ˗ve | - |
| 3 | 65/14 | 2 /M | 6 | 1.7 | ˗ve | - |
| 4 | 66/14 | 10/ F | 3 | 2.3 | ˗ve | - |
| 5 | 67/14 | 26/ F | 7 | 2.8 | ˗ve | - |
| 6 | 68/14 | 50/ M | 3 | 2.9 | ˗ve | - |
| 7 | 69/14 | 17 /M | 5 | 2.3 | +ve | D1, D2 |
| 8 | 70/14 | 20 /M | 7 | 1.8 | +ve | D1, D2 |
| 9 | 71/14 | 14/M | 6 | 2 | +ve | D1 |
| 10 | 72/14 | 55/F | 5 | 2.3 | ˗ve | - |
| 11 | 73/14 | 5/F | 3 | 1.8 | +ve | D1, D2 |
| 12 | 74/14 | 8/M | 1 | 1.8 | +ve | D1, D2 |
| 13 | 75/14 | 25/M | 2 | 2.6 | +ve | D1, D2 |
| 14 | 76/14 | 25/M | 6 | 3.2 | -ve | - |
| 15 | 77/14 | 29M | 5 | 2.6 | +ve | D1, D2 |
| 16 | 78/14 | 24/M | 6 | 1.9 | +ve | D1 |
| 17 | 79/14 | 22/M | 3 | 2.6 | +ve | D1 |
| 18 | 80/14 | 4/F | 5 | 2.5 | +ve | D1 |
| 19 | 81/14 | 19/F | 7 | 2.4 | +ve | D2 |
| 20 | 82/14 | 20/M | 6 | 2.4 | +ve | D1 |
| 21 | 83/14 | 20/F | 3 | 2.6 | +ve | D2 |
| 22 | 84/14 | 25/M | 5 | 2 | +ve | D2 |
| 23 | 85/14 | 12/M | 5 | 3 | -ve | D2 |
| 24 | 86/14 | 18/M | 6 | 2 | +ve | D2 |
| 25 | 87/14 | 23/F | 6 | 2 | +ve | D2 |
| 26 | 88/14 | 26/M | 3 | 2.5 | +ve | D2 |
| 27 | 89/14 | 21/F | 7 | 2.8 | +ve | D2 |
| 28 | 90/14 | 35M | 5 | 1.8 | +ve | D1, D2 |
| 29 | 91/14 | 12/F | 4 | 2.6 | +ve | D1, D2 |
| 30 | 92/14 | 24/F | 2 | 2.1 | +ve | D1, D2 |
| 31 | 93/14 | 22/M | 3 | 3.4 | -ve | D1 |
| 32 | 94/14 | 21/M | 5 | 3.7 | +ve | D1 |
| 33 | 95/14 | 20/M | 3 | 1.8 | +ve | D1 |
| 34 | 96/14 | 27/M | 2 | 2.3 | +ve | D1 |
| 35 | 97/14 | 41/M | 7 | 3.2 | -ve | D1 |
| 36 | 98/14 | 22/M | 3 | 2.7 | +ve | D1 |
| 37 | 108/14 | 19/M | 7 | 2.2 | +ve | D1 |
| 38 | 109/14 | 22/M | 2 | 2.4 | +ve | D1 |
| 39 | 110/14 | 12/M | 3 | 2.5 | +ve | D1 |
| 40 | 111/14 | 30/M | 2 | 2.3 | +ve | D1 |
| 41 | 112/14 | 7/F | 3 | 2 | +ve | D1, D2 |
| 42 | 113/14 | 12/M | 3 | 3.1 | +ve | D1, D2 |
| 43 | 123/14 | 13/M | 1 | 2.4 | +ve | D1, D2 |
| 44 | 124/14 | 18/M | 3 | 2.1 | ˗ve | - |
| 45 | 125/14 | 18/M | 4 | 2.7 | +ve | D1, D2 |
| 46 | 126/14 | 15/M | 4 | 0.6 | +ve | D1, D2 |
| 47 | 137/14 | 50/M | 4 | 2.5 | +ve | D1, D2 |
| 48 | 138/14 | 19/M | 2 | 3.5 | +ve | D1, D2 |
| 49 | 140/14 | 18/M | 6 | 3.5 | +ve | D1, D2 |
| 50 | 141/14 | 9/F | 5 | 2.3 | +ve | D1, D2 |
| 51 | 142/14 | 15/F | 3 | 2 | +ve | D1 |
| 52 | 143/14 | 10/F | 7 | 3.7 | +ve | D1 |
| 53 | 144/14 | 9/M | 7 | 2 | +ve | D1 |
| 54 | 145/14 | 5/M | 5 | 2.6 | +ve | D1 |
| 55 | 146/14 | 50/M | 3 | 2.8 | +ve | D1, D2 |
| 56 | 147/14 | 18/F | 7 | 2.8 | +ve | D1, D2 |
| 57 | 148/14 | 23/M | 3 | 2 | +ve | D1 |
| 58 | 153/14 | 15/M | 4 | 2.5 | +ve | D1, D2 |
| 59 | 154/14 | 34/F | 5 | 2.3 | +ve | D1 |
| 60 | 155/14 | 19/M | 4 | 2.4 | +ve | D1 |

**Note:** +ve denotes that the sample is positive for Dengue virus

**-**ve denotes that the sample is positive for Dengue virus

**Supplementary Table S2a:** Dengue-1 strains that were used for phylogenetic analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Strain** | **Country** | **Year of isolation** | **Accession number** |
| 1. | Hawaii (Prototype strain) | USA | 1944 | EU848545 |
| 2. | D1/Hu/Saitama/NIID100/2014 | Japan | 2014 | LC011945 |
| 3. | Malaysia 2008 | Malaysia | 2008 | JN415512 |
| 4. | DV1\_SL\_2010b | Sri Lanka | 2010 | JN054255 |
| 5. | SG(EHI)D1/37966Y10 | Thailand | 2010 | JF960228 |
| 6. | DENV-1/VN/BID-V2754/2007 | Vietnam | 2007 | GQ199778 |
| 7. | DENV-1/IPC/BID-V3919/2000 | Cambodia | 2000 | GQ868637 |
| 8. | ThD1\_0081\_82 | Thailand | 1982 | AY732481 |
| 9. | GZ/80 | China | 2001 | AF350498 |
| 10. | Mochizuki | Japan | 2001 | AB074760 |
| 11. | D1/hu/Seychelles/NIID41/2003 | Japan | 2003 | AB195673 |
| 12. | SKB-CM046 | Indonesia | 2012 | KF052649 |
| 13. | HawO3663 | USA | 2001 | DQ672564 |
| 14. | Nauru Island, Western Pacific | Western Pacific | 1997 | U88535 |
| 15. | TH-SMAN | Thailand | 1991 | D10513 |
| 16. | DenKor-01 | Korea | 2004 | EF654104 |
| 17. | 606147 | Thailand | 1960 | JQ922547 |
| 18. | P72-1244 | Malaysia | 1972 | AF425622 |
| 19. | D1/IN/RGCB294/2007 | India | 2007 | JN903578 |
| 20. | IBH 28328 | Nigeria | 1968 | AF425625 |
| 21. | DENV-1/IND/715393/1971 | India | 1971 | JQ922546 |
| 22. | BeH 584526 | Brazil | 1997 | AF425614 |
| 23. | D1/IN/RGCB592/2009 | India | 2009 | JN903581 |
| 24. | DL-DENV-1/32/13 | India | 2013 | KJ729163 |
| 25. | 125239 | Venezuela | 1994 | AF425637 |
| 26. | 1298/TVP 951 | Mexico | 1980 | AF425623 |
| 27. | CAREC780572 | Trinidad and Tobago | 1978 | AF425631 |
| 28. | CAREC86471 | Trinidad and Tobago | 1980 | AF425639 |
| 29. | 495-I | Aruba | 1985 | AF425609 |
| 30. | FP/89/5103 | French Polynesia | 1989 | AY630408 |
| 31. | DEN-1 BR/90 | Brazil | 1993 | S64849 |
| 32. | D1/India/1009bTw/10 | India | 2010 | JF967939 |
| 33. | INS 371869 | Columbia | 1996 | AF425617 |
| 34. | 280par00 | USA | 2002 | AF514878 |
| 35. | PRS288690 | Jamaica | 1997 | AF425621 |
| 36. | Cesara1 | Costa Rica | 1993 | AY153755 |
| 37. | CNM438V103 | Nicaragua | 2005 | DQ016657 |
| 38. | ThD1067380 | Thailand | 1980 | AY732474 |
| 39. | PRS228686 | Myanmar | 1976 | AF425615 |
| 40. | My98D132514 | Myanmar | 2004 | AY600860 |
| 41. | RIO H 36589 | Angola | 1988 | AF425610 |
| 42. | 28164 | Venezuela | 1997 | AF425634 |
| 43. | Den 1E/AIIMS Delhi/1117/2010 | India | 2010 | KC863941 |
| 44. | SG(EHI)D1/22170Y11 | Singapore | 2011 | JN544400 |
| 45. | D1/India/1009aTw | India | 2010 | JF967935 |
| 46. | Abidjan | Abidjan | 2000 | AF298807 |
| 47. | DEI 0151 | Peru | 1991 | AF425626 |
| 48. | DENV-1/IND/826853/1982 | India | 1982 | JQ922545 |
| 49. | 62234 | India | 1962 | JF297573 |
| 50. | Den 1E/AIIMS Delhi/1132/2011 | India | 2010 | KC863942 |
| 51. | D1/SBY19/09 | Indonesia | 2009 | AB550413 |
| 52. | Caribbean 924-1 | Caribbean | 1989 | D00504 |
| 53. | NC12/181212-3578 | New Caledonia | 2012 | KC854414 |
| 54. | N104V104 | Nicaragua | 2006 | DQ016656 |
| 55. | W152V104 | India | 2005 | DQ016653 |
| 56. | D1.Myanmar.32514/98 | Myanmar | 1998 | AY722803 |
| 57. | 58485/BR/MG/1997 | Brazil | 1997 | KF672769 |
| 58. | MYS(Perak)D1/3Y13 | Malaysia | 2013 | KJ806827 |
| 59. | NC12/231112-2877 | New Caledonia | 2012 | KC854412 |
| 60. | CT-M-0399 | Vietnam | 2011 | JN376784 |
| 61. | Guangzhou 14-02 | China | 2014 | KP185303 |
| 62. | GZ8581/CHN/2011 | China | 2011 | JX088739 |
| 63. | D1PY/NM88/11 | Paraguay | 2011 | KF419421 |
| 64. | US/DB167/2014 | USA | 2014 | KM458188 |
| 65. | DL/DENV-2/24/14 | India | 2014 | KR091047 |
| 66. | SG(EH1)DI/19944Y13 | Singapore | 2013 | KP685234 |
| 67. | SG(EH1)D107398414 | Singapore | 2014 | KJ806964 |
| 68. | D1/Pakistan/2014/11 | Pakistan | 2014 | KT239344 |
| 69. | DENV-1/BR/BID-V2375/2000 | Brazil | 2000 | FJ850071 |
| 70. | Den1BR/90 | Brazil | 1990 | AF226685 |

**Supplementary Table S2b:** Dengue-2 strains that were used for phylogenetic analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Strain** | **Country** | **Year of isolation** | **Accession Number** |
| 1. | 16681(Prototype strain) | Thailand | 1984 | U87411 |
| 2. | 1392 | India | 2009 | JX475906 |
| 3. | SG(EHI)D2/72054Y10 | Singapore | 2010 | JN030345 |
| 4. | PUO-218 | Thailand | 1980 | D00345 |
| 5. | CAMR17 | Singapore | 1991 | AF410379 |
| 6. | PR152 | Puerto Rico | 1969 | AF264054 |
| 7. | P8-377 | Malaysia | 1969 | AF231715 |
| 8. | D94-179 | Thailand | 1999 | AF195036 |
| 9. | ThD2\_0078\_01 | Thailand | 2001 | DQ181797 |
| 10. | Peru539-96 | Peru | 1998 | AF093674 |
| 11. | 44 | China | 1989 | AF204177 |
| 12. | ThNH36/93 | Thailand | 1997 | AF169679 |
| 13. | GWL181NDI-01 | India | 2001 | DQ448231 |
| 14. | Od2112 | India | 2011 | JQ955624 |
| 15. | RR44 | India | 2009 | JQ955623 |
| 16. | CAMR8 | India | 1997 | AF410373 |
| 17. | Southeast Asia 2010a | Southeast Asia | 2010 | JN568277 |
| 18. | Malay0412a/Tw | Malaysia | 2004 | DQ518636 |
| 19. | IBH11234 | Nigeria | 1966 | EU003591 |
| 20. | Tonga/74 | Polynesia | 1974 | AY744147 |
| 21. | Ven2 | Venezuela | 1987 | AY158328 |
| 22. | DL/DENV-2/209/13 | India | 2013 | KJ729157 |
| 23. | 206 | Saudi Arabia | 1994 | AM746227 |
| 24. | ACS46\_II | Brazil | 2010 | JX286517 |
| 25 | New Guinea C | New Guinea | 1944 | AF038403 |
| 26. | FPA1597/PAR/10 | Paraguay | 2010 | JX051814 |
| 27. | FSB1704/BOL/07 | Brazil | 2007 | JX051803 |
| 28. | IQD2227/PER/02 | Peru | 2002 | JX051773 |
| 29. | P9-122 | India | 1957 | L10043 |
| 30. | DAKHD10674 | Ivory Coast | 1970 | AF231720 |
| 31. | JA/DB021/2008 | Jamaica | 2008 | JF804034 |
| 32. | MD1223 | South Vietnam | 2004 | GU434159 |
| 33. | East Timor 2010 | East Timor | 2010 | JN568257 |
| 34. | Townsville 2010a | Australia | 2010 | JN568279 |
| 35. | D2/Laos/1006aTw | Laos | 2010 | JF968020 |
| 36. | Vietnam 2010a | Vietnam | 2010 | JN568281 |
| 37. | D2/IN/RGCB880/2010 | India | 2010 | KF364513 |
| 38. | 942201 | India | 1994 | FJ807640 |
| 39. | 965338 | India | 1996 | FJ807638 |
| 40. | 057561 | India | 2005 | FJ807633 |
| 41. | D2/Bangladesh/0510aTw | Bangladesh | 2005 | EU448423 |
| 42. | Den 14/Odisha | India | 2011 | KC800608 |
| 43. | D2/Pakistan/4C/2011 | Pakistan | 2011 | JX042500 |
| 44. | D2/India/0403aTw | India | 2004 | EU448422 |
| 45. | Torres Strait | Australia | 1996 | AF004019 |
| 46. | PNG 2003 | New Guinea | 2003 | JN568266 |
| 47. | DAKAr578 | Ivory Coast | 1980 | AF231718 |
| 48. | 00-36-1HuN11D | Philippines | 2000 | AB111451 |
| 49. | 01-St-206 | Philippines | 2001 | KF744397 |
| 50. | Cairns 2008 | Australia | 2008 | JN568252 |
| 51. | 98900666 DSS DV-2 | Indonesia | 1998 | AB189124 |
| 52. | PF96/130896-219164 | French Polynesia | 1996 | JQ650019 |
| 53. | NC98/170798-4138 | New Caledonia | 1998 | JQ650036 |
| 54. | D2\_K2\_RIJ\_059/Dar es Salam 2014 | Tanzania | 2014 | KT288902 |
| 55. | D2/THA/086/2012 | Thailand | 2012 | KM216717 |
| 56. | TBI6i | Indonesia | 2007 | AY858036 |
| 57. | MYS(Melaka)D2/426Y14 | Malaysia | 2014 | KJ806932 |
| 58. | S301/05 | Singapore | 2005 | EU069576 |
| 59. | D2/Vietnam/0711bTw | Vietnam | 2007 | EU448428 |
| 60. | DC719Y12 | Singapore | 2012 | KM279597 |
| 61. | Kuranda2002 | Australia | 2002 | JN568261 |
| 62. | C1077/Chilpanungo97 | Mexico | 1997 | AY449679 |
| 63. | PM33974 | Guinea | 1981 | AF231719 |
| 64. | Mara4 | Venezuela | 1990 | AF100466 |
| 65. | 12914/Texax01 | Mexico | 2003 | AY449680 |
| 66. | DEN2/H/IMTSSA-MART/98-703 | Martinique | 1998 | AF208496 |
| 67. | BC134-Merida-94 | Mexico | 1994 | AY466449 |