## Molecularly cloned HIV-1 gp160 genes for use as Env-pseudotyped viruses (page 1)

| | | | | | | | ID50 (µg/ml) in TZM-bl cells[3] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Clade B Reference clone[1]** | **Country of origin** | **Stage of infection** | **Mode of transmission** | **Source[2]** | **Accession number** | **ARRRP cat #** | **sCD4** | **IgG1b12** | **2G12** | **2F5** | **4E10** | **TriMab** | **Ref** |
| 6101.10 | USA | Acute/early | M-M | ccPBMC | AY835434 | | 6.0 | >50 | 3.0 | >50 | 0.3 | 10.1 | 1 |
| 5768.4 | USA | Acute/early | M-M | ccPBMC | AY835435 | | 4.0 | 3.0 | 9.0 | 12 | 6.1 | 0.9 | 1 |
| 3988.25 | USA | Acute/early | M-M | ccPBMC | AY835436 | | 12.0 | 0.4 | 0.3 | >50 | 0.5 | 0.8 | 1 |
| 7165.18 | USA | Acute/early | M-M | ccPBMC | AY835437 | | 4.3 | >50 | 0.9 | 3.9 | 1.1 | 1.2 | 1 |
| 6535.3* | USA | Acute/early | M-M | ccPBMC | AY835438 | 11017 | 0.8 | 1.4 | 2.0 | 1.9 | 0.2 | 1.2 | 1 |
| QH0692.42* | Trinidad | Acute/early | F-M | ccPBMC | AY835439 | 11018 | 0.5 | 0.3 | 2.8 | 1.0 | 1.4 | 0.3 | 1 |
| QH0515.1 | Trinidad | Acute/early | F-M | ccPBMC | AY835440 | | 8.0 | 2.6 | 0.1 | 10 | 5.0 | 0.1 | 1 |
| SC422661.8* | Trinidad | Acute/early | F-M | Plasma | AY835441 | 11058 | 4.7 | 0.2 | 2.1 | 0.7 | 0.9 | 0.3 | 1 |
| SS1196.1 | USA | Acute/early | M-M | ccPBMC | AY835442 | | 0.8 | 0.3 | 12.0 | 24 | 0.3 | 0.5 | 1 |
| BG1168.1 | USA | Acute/early | M-M | ccPBMC | AY835443 | | 10.0 | >50 | >50 | 0.8 | 1.8 | 3.5 | 1 |
| PVO.4* | Italy | Acute/early | M-M | ccPBMC | AY835444 | 11022 | 6.7 | >50 | 1.2 | >50 | 6.5 | 4.2 | 1 |
| TRO.11* | Italy | Acute/early | M-M | ccPBMC | AY835445 | 11023 | 11.5 | >50 | 0.4 | >50 | 0.3 | 0.8 | 1 |
| AC10.0.29* | USA | Acute/early | M-M | ccPBMC | AY835446 | 11024 | 8.5 | 1.9 | >50 | 1.3 | 0.3 | 0.9 | 1 |
| RHPA4259.7* | USA | Acute/early | M-F | Plasma | AY835447 | 11036 | 1.8 | 0.1 | >50 | 12.0 | 6.9 | 0.1 | 1 |
| THRO4156.18* | USA | Acute/early | M-M | Plasma | AY835448 | 11037 | 0.3 | 0.5 | >50 | >50 | 0.3 | 1.0 | 1 |
| REJO4541.67* | USA | Acute/early | F-M | Plasma | AY835449 | 11035 | 0.5 | 0.7 | >50 | 0.6 | 0.7 | 0.5 | 1 |
| TRJO4551.58* | USA | Acute/early | M-M | Plasma | AY835450 | 11034 | 20.2 | >50 | >50 | >50 | 4.5 | >25 | 1 |
| WITO4160.33* | USA | Acute/early | F-M | Plasma | AY835451 | 11033 | 5.4 | 3.1 | 1.1 | 0.6 | 0.3 | 0.7 | 1 |
| CAAN5342.A2* | USA | Acute/early | M-M | Plasma | AY835452 | 11038 | 16.0 | >50 | >50 | 3.6 | 2.7 | 17.9 | 1 |
| **Clade C Reference clone[1]** | **Country of origin** | **Stage of infection** | **Mode of transmission** | **Source[2]** | **Accession number** | **ARRRP cat #** | **sCD4** | **IgG1b12** | **2G12** | **2F5** | **4E10** | **TriMab** | **Ref** |
| Du123.6 | S. Africa | Acute/early | M-F | ccPBMC | DQ411850 | | 0.3 | 0.2 | >50 | >50 | 0.1 | 1.6 | 2 |
| Du151.2 | S. Africa | Acute/early | M-F | ccPBMC | DQ411851 | | 3.0 | 1.4 | >50 | >50 | 0.8 | 13.5 | 2 |
| Du156.12* | S. Africa | Acute/early | M-F | ccPBMC | DQ411852 | 11306 | 13.4 | 0.8 | >50 | >50 | 0.2 | 1.2 | 2 |
| Du172.17* | S. Africa | Acute/early | M-F | ccPBMC | DQ411853 | 11307 | 1.7 | 1.0 | >50 | >50 | 0.3 | 2.6 | 2 |
| Du422.1* | S. Africa | Acute/early | M-F | ccPBMC | DQ411854 | 11308 | 9.1 | 0.2 | >50 | >50 | 0.7 | 0.8 | 2 |
| ZM197M.PB7* | Zambia | Acute/early | F-M | ucPBMC | DQ388515 | 11309 | 3.9 | 19.9 | >50 | 12.3 | 0.5 | 24.8 | 2 |
| ZM214M.PL15* | Zambia | Acute/early | F-M | Plasma | DQ388516 | 11310 | 8.0 | 3.0 | >50 | >50 | 4.0 | 9.7 | 2 |
| ZM215F.PB8 | Zambia | Acute/early | M-F | ucPBMC | DQ422948 | | 14.0 | >50 | >50 | >50 | 0.4 | >25 | 2 |
| ZM233M.PB6* | Zambia | Acute/early | F-M | ucPBMC | DQ388517 | 11311 | 2.9 | >50 | >50 | >50 | 1.2 | >25 | 2 |
| ZM249M.PL1* | Zambia | Acute/early | F-M | Plasma | DQ388514 | 11319 | 9.7 | 3.2 | >50 | >50 | 2.1 | 7.9 | 2 |
| ZM53M.PB12* | Zambia | Acute/early | F-M | ucPBMC | AY423984 | 11313 | 8.3 | 25.9 | >50 | >50 | 7.0 | >25 | 2 |
| ZM55F.PB28a | Zambia | Acute/early | M-F | ucPBMC | AY423971 | | 24.0 | >50 | >50 | 33.6 | 8.0 | >25 | 2 |
| ZM109F.PB4* | Zambia | Acute/early | M-F | ucPBMC | AY424138 | 11314 | 0.2 | >50 | >50 | >50 | 0.6 | >25 | 2 |
| ZM106F.PB9 | Zambia | Acute/early | M-F | ucPBMC | AY424163 | | 23.0 | >50 | >50 | >50 | 7.2 | >25 | 2 |
| ZM135M.PL10a* | Zambia | Acute/early | F-M | Plasma | AY424079 | 11315 | 6.1 | >50 | >50 | >50 | 0.6 | >25 | 2 |
| CAP45.2.00.G3* | Zambia | Acute/early | M-F | Plasma | DQ435682 | 11316 | 26.0 | 0.7 | >50 | >50 | 2.6 | 1.5 | 2 |
| CAP210.2.00.E8* | S. Africa | Acute/early | M-F | Plasma | DQ435683 | 11317 | 3.4 | 20.4 | >50 | >50 | 1.2 | 20.8 | 2 |
| CAP244.2.00.D3 | S. Africa | Acute/early | M-F | Plasma | DQ435684 | | 8.9 | >50 | >50 | >50 | 1.9 | >25 | 2 |

## Molecularly cloned HIV-1 gp160 genes for use as Env-pseudotyped viruses (page 2)

| | | | | | | | ID50 (µg/ml) in TZM-bl cells[3] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lima clade B clone** | **Country of origin** | **Stage of infection** | **Mode of transmission** | **Source[2]** | **Accession number** | **ARRRP cat #** | **sCD4** | **IgG1b12** | **2G12** | **2F5** | **4E10** | **TriMab** | **Ref** |
| H022.7 | Peru | Chronic | Sexual | ccPBMC | EF210725 | | 8.8 | 9.3 | >50 | 3.9 | 2.6 | 9.8 | 3 |
| H029.12 | Peru | Chronic | Sexual | ccPBMC | EF210726 | | 8.5 | >50 | 0.1 | 0.4 | 0.7 | 0.4 | 3 |
| H030.7 | Peru | Chronic | Sexual | ccPBMC | EF210727 | | 16.0 | >50 | >50 | 2.3 | 3.0 | 3.7 | 3 |
| H031.7 | Peru | Chronic | Sexual | ccPBMC | EF210728 | | 24.3 | 0.9 | 1.4 | 0.2 | 0.4 | 0.1 | 3 |
| H035.18 | Peru | Chronic | Sexual | ccPBMC | EF210729 | | 1.6 | >50 | 36.7 | 0.2 | 0.4 | 0.5 | 3 |
| H061.14 | Peru | Chronic | Sexual | ccPBMC | EF210730 | | 1.4 | 0.2 | 0.5 | 0.1 | 0.9 | 0.4 | 3 |
| H079.2 | Peru | Chronic | Sexual | ccPBMC | EF210731 | | 3.2 | 6.5 | >50 | 6.4 | 1.7 | 4.8 | 3 |
| H086.8 | Peru | Chronic | Sexual | ccPBMC | EF210732 | | 2.1 | >50 | >50 | 0.2 | 1.2 | 1.1 | 3 |
| H077.31 | Peru | Chronic | Sexual | ccPBMC | EF210734 | | 13.9 | >50 | >50 | 3.4 | 6.2 | 8.0 | 3 |
| H078.14 | Peru | Chronic | Sexual | ccPBMC | EF210733 | | 21.3 | >50 | >50 | >50 | 5.4 | >25 | 3 |
| H080.23 | Peru | Chronic | Sexual | ccPBMC | EF210735 | | 6.8 | >50 | 3.8 | >50 | 1.4 | 5.6 | 3 |
| **CRF07_BC clone** | **Country of origin** | **Stage of infection** | **Mode of transmission** | **Source[2]** | **Accession number** | **ARRRP cat #** | **sCD4** | **IgG1b12** | **2G12** | **2F5** | **4E10** | **TriMab** | **Ref** |
| CH038.12 | China | Chronic | IVDU | ccPBMC | EF042692 | | 17.4 | 2.8 | 0.1 | >50 | 5.4 | | 4 |
| CH064.20 | China | Chronic | IVDU | ccPBMC | EF117254 | | 8.8 | >25 | >25 | >25 | 0.4 | | 4 |
| CH070.1 | China | Chronic | IVDU | ccPBMC | EF117255 | | 1.0 | >25 | >25 | >25 | 0.3 | | 4 |
| CH091.9 | China | Chronic | IVDU | ccPBMC | EF117256 | | 7.6 | >25 | >25 | >25 | 0.7 | | 4 |
| CH110.2 | China | Chronic | IVDU | ccPBMC | EF117257 | | 1.5 | 10.8 | >25 | >25 | 0.1 | | 4 |
| CH111.8 | China | Chronic | IVDU | ccPBMC | EF117258 | | 4.6 | >50 | >50 | >50 | 1.5 | | 4 |
| CH181.12 | China | Chronic | IVDU | ccPBMC | EF117259 | | 5.5 | 2.5 | >25 | >25 | 0.8 | | 4 |
| CH120.6 | China | Chronic | IVDU | ccPBMC | EF117260 | | 9.7 | >25 | >25 | >25 | 2.9 | | 4 |
| CH119.10 | China | Chronic | IVDU | ccPBMC | EF117261 | | 11.3 | >25 | >25 | >25 | 1.6 | | 4 |
| CH117.4 | China | Chronic | IVDU | ccPBMC | EF117262 | | 3.3 | >25 | >25 | >25 | 0.1 | | 4 |
| CH115.12 | China | Chronic | IVDU | ccPBMC | EF117263 | | 10.9 | 23.8 | 0.6 | >25 | 1.8 | | 4 |
| CH114.8 | China | Chronic | IVDU | ccPBMC | EF117264 | | 1.6 | >25 | >25 | >25 | 0.4 | | 4 |
| **India clade C clone** | **Country of origin** | **Stage of infection** | **Mode of transmission** | **Source[2]** | **Accession number** | **ARRRP cat #** | **sCD4** | **IgG1b12** | **2G12** | **2F5** | **4E10** | **TriMab** | **Ref** |
| HIV-00836-2.5 | India | Acute/early | Sexual | ccPBMC | EF117265 | | >50 | >50 | >50 | >50 | 1.8 | >25 | 5 |
| HIV-001428-2.42 | India | Acute/early | Sexual | ccPBMC | EF117266 | | 5.2 | >50 | >50 | >50 | 10.1 | >25 | 5 |
| HIV-0013095-2.11 | India | Acute/early | Sexual | ccPBMC | EF117267 | | 1.1 | >50 | >50 | >50 | 0.1 | >25 | 5 |
| HIV-16055-2.3 | India | Acute/early | Sexual | ccPBMC | EF117268 | | 11.4 | >50 | >50 | >50 | 1.7 | >25 | 5 |
| HIV-16845-2.22 | India | Acute/early | Sexual | ccPBMC | EF117269 | | 1.0 | >50 | >50 | >50 | 0.1 | >25 | 5 |
| HIV-16936-2.21 | India | Acute/early | Sexual | ccPBMC | EF117270 | | 4.4 | >50 | >50 | >50 | 1.8 | >25 | 5 |
| HIV-25710-2.43 | India | Acute/early | Sexual | ccPBMC | EF117271 | | 2.6 | >50 | >50 | >50 | 0.2 | >25 | 5 |
| HIV-25711-2.4 | India | Acute/early | Sexual | ccPBMC | EF117272 | | 29.0 | 25.9 | >50 | 36.2 | 4.2 | >25 | 5 |
| HIV-25925-2.22 | India | Acute/early | Sexual | ccPBMC | EF117273 | | 12.9 | >50 | >50 | >50 | 1.5 | >25 | 5 |
| HIV-26191-2.48 | India | Acute/early | Sexual | ccPBMC | EF117274 | | 17.1 | 4.9 | >50 | >50 | 3.1 | 14.1 | 5 |

## Molecularly cloned HIV-1 gp160 genes for use as Env-pseudotyped viruses (page 3)

| | | | | | | | ID50 (µg/ml) in TZM-bl cells[3] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Clade A clone** | **Country of origin** | **Stage of infection** | **Mode of transmission** | **Source[2]** | **Accession number** | **ARRRP cat #** | **sCD4** | **IgG1b12** | **2G12** | **2F5** | **4E10** | **TriMab** | **Ref** |
| Q23.17 | Kenya | Chronic | M-F | | AF004885 | 10455 | 11.1 | >50 | >50 | 2.9 | 1.3 | 4.6 | 6 |
| Q168.a2 | Kenya | Acute/early | M-F | | AF407148 | 10456 | 5.6 | >50 | >50 | 3.2 | 2.3 | 6.3 | 6 |
| Q461.e2 | Kenya | Acute/early | M-F | | AF407156 | 10460 | 15.0 | >50 | >50 | 4.1 | 2.0 | 13.0 | 6 |
| Q769.d22 | Kenya | Acute/early | M-F | | AF407158 | 10458 | 0.6 | >50 | >50 | 0.5 | 0.4 | 2.1 | 6 |
| Q259.d2.17 | Kenya | Acute/early | M-F | | AF407152 | 10459 | 9.7 | >50 | >50 | 7.1 | 8.5 | 20.1 | 6 |
| Q842.d12 | Kenya | Acute/early | M-F | | AF407160 | 10457 | 13.5 | >50 | >50 | 5.2 | 2.0 | 10.5 | 6 |

[1]Clones with an asterix comprise standard panels of reference strains (clade B reference strains are available as a complete set from the NIH ARRRP, cat # 11227; clade C reference strains are available as a complete set from the NIH ARRRP, cat # 11326).

[2]ccPBMC, co-cultured PBMC; ucPBMC, uncultured PBMC.

[3]Values are the concentration (µg/ml) at which relative luminescence units (RLUs) were reduced 50% compared to virus control wells (no test sample). TriMab is an equal concentration mixture of IgG1b12, 2G12 and 2F5.

**References**

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2. Li, M., J.F. Salazar-Gonzalez, C.A. Derdeyn, L. Morris, C. Williamson, J.E. Robinson, J.M. Decker, Y. Li, M.G. Salazar, V.R. Polonis, K. Mlisana, S.A. Karim, K. Hong, K.M. Greene, M. Bilska, J.T. Zhou, S. Allen, E. Chomba, J. Mulenga, C. Vwalika, F. Gao, M. Zhang, B.T.M. Korber, E. Hunter, B.H. Hahn, and D.C. Montefiori. (2006) Genetic and neutralization properties of subtype C human immunodeficiency virus type 1 molecular *env* clones from acute and early heterosexually acquired infections in southern Africa. J. Virol., 80:11776-11790.

3. These clade B clones from Lima, Peru were created in collaboration with Rosario Zuniga, Aldo Lucchetti, Patricia Galvan, Shyla Sanchez, Jesus Peinado (Asociación Civil IMPACTA Salud y Educación, Lima, Peru); Christian Brander, Todd Allen, Marcus Altfeld and Bruce Walker (Partners AIDS Research Center, Boston, MA); Ming Li, Haili Tang and David Montefiori (Duke University Medical Center, Durham, NC).

4. These CRF07_BC clones from China were created in collaboration with Yiming Shao and Kunxue Hong (Chinese Center for Disease Control and Prevention, Beijing, China); Haili Tang and David Montefiori (Duke University Medical Center, Durham, NC).

5. These clade C clones from India were created in collaboration with Ramesh Paranjape, Jayanta Bhattacharya, Smita Kulkarni (National AIDS Research Institute, Pune, India); Robert Bollinger (Johns Hopkins School of Medicine, Baltimore, MD); Haili Tang, Ming Li and David Montefiori (Duke University Medical Center, Durham, NC).

6. Blish, C.A, R. Nedellec, K. Mandaliya, D.E. Mosier, and J. Overbaugh. (2007) HIV-1 subtype A envelope variants from early in infection have variable sensitivity to neutralization and to inhibitors of viral entry. Submitted.