

Data Sheet

REPOSITORY REFERENCE:	ARP2069
NAME:	Subtype C HIV-1 Reference Panel of Env Clones
PROVIDED:	1 vial of plasmid DNA in TE buffer.
CLONING SITE:	The HIV-1 env/rev cassette was either directly inserted (Du156.12, Du172.17, Du422.1, CAP45.2.00.G3 and CAP210.2.00E8) or TA cloned (all others) into the cloning site of the expression vector in the correct orientation with the CMV promoter.
RECOMMENDED STORAGE:	-80°C.
CONTRIBUTOR:	See table below.
DESCRIPTION:	<p>This clade C reference panel was designed for use as Env-pseudotyped viruses to facilitate standardized Tier 2/3 assessments of HIV-1-specific neutralizing antibodies (Mascola JR. et al. <i>J Virology</i> 79(16):10103, 2005). When co-transfected with an env-deleted backbone plasmid (e.g. pSG3Δenv, cat# 11051) in 293T cells, these plasmids produce Env pseudotyped viruses that are capable of a single round of infection in TZM-bl cells (ARP5011). The TZM-bl cell line is not part of this panel; therefore it should be separately ordered. The Env-pseudotyped viruses exhibit a neutralization phenotype that is typical of most primary HIV-1 isolates. Notably, no clone is unusually sensitive or resistant to neutralization. The gp160 genes were cloned from sexually acquired, acute/early infections and comprise a wide spectrum of genetic, antigenic and geographic diversity within subtype C (Li M, et al. manuscript in preparation). These clones use CCR5 as co-receptor. Plasmid sequence information is available upon request.</p>

REFERENCES:

1. Li, M. et al. in preparation.
2. Derdeyn C.A., Decker J.M., Bibollet-Ruche F., Mokili J. L., Muldoon M., Denham S.A., Heil M.L., Lee J.Y., Kasolo F., Musonda R., Hahn B.H., Shaw G.M., Korber B. T., Allen S. and Hunter E. (2004). Envelope-Constrained, Neutralization-Sensitive HIV-1 Following Heterosexual Transmission. *Science* **303**(5666):2019-2022, 2004.
3. Williamson C., Morris L., Maughan M.F., Ping L.H., Dryga S.A., Thomas R., Reap E.A., Cilliers T., van Harmelen J., Pascual A., Ramjee G., Gray G., Johnston R., Abdool-Karim S., Swanstrom R. Characterization and selection of HIV-1 subtype C isolates for use in vaccine development. *AIDS Res Hum Retro.*, **19**: 133-144, 2003.

NOTE:

Scientists at for-profit institutions or who intend commercial use of the ZM clones, must contact William S. White, UAB Research Foundation, The Office of Intellectual Property Management, AB 1120G, 1530 3rd Ave. S, Birmingham, AL 35294-0111, Tel: 205-996-2550 Fax: 205-934-5427, Email: wswwhite@uab.edu,

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Clone	Provided	Conc.	Antibiotics Resistance
Du156.12	7µg	264µg/ml	Ampicillin & Neomycin
Du172.17	9µg	341µg/ml	Ampicillin & Neomycin
Du422.1	10µg	401µg/ml	Ampicillin & Neomycin
ZM197M.PB7	10µg	403µg/ml	Ampicillin
ZM214M.PL15	11µg	537µg/ml	Ampicillin
ZM233M.PL6	12µg	479µg/ml	Ampicillin
ZM249M.PB12	10µg	530µg/ml	Ampicillin
ZM53M.PB12	12µg	390µg/ml	Ampicillin
ZM109F.PB4	10µg	306µg/ml	Ampicillin
ZM135M.PL10a	9µg	346µg/ml	Ampicillin
CAP45.2.00.G3	9µg	338µg/ml	Ampicillin
CAP210.2.00E8	7µg	267µg/ml	Ampicillin

Clade C HIV-1 reference panel of Env clones

Env clone	Lot Number	Panel designation	Insert/Vector Size (bp)	Vector Type	Mode of Transmission	Country of Origin	Contributor	Accession number	Reference
Du156.12	I 060466	SVPC3	3165/8675	pcDNA3.1D/V5-His TOPO®	M-F	South Africa	A	DQ411852	1,3
Du172.17	I 060467	SVPC4	3175/8685	pcDNA3.1D/V5-His TOPO®	M-F	South Africa	A	DQ411853	1,3
Du422.1	I 060468	SVPC5	3168/8678	pcDNA3.1D/V5-His TOPO®	M-F	South Africa	B	DQ411854	1,3
ZM197M.PB7	I 060469	SVPC6	3154/8677	pcDNA3.1/V5-His TOPO®	F-M	Zambia	C	DQ388515	1
ZM214M.PL15	I 060470	SVPC7	3238/8761	pcDNA3.1/V5-His TOPO®	F-M	Zambia	C	DQ388516	1
ZM233M.PB6	I 060471	SVPC9	3189/8712	pcDNA3.1/V5-His TOPO®	F-M	Zambia	C	DQ388517	1
ZM249M.PL1	I 060472	SVPC10	3237/8760	pcDNA3.1/V5-His TOPO®	F-M	Zambia	C	DQ388514	1
ZM53M.PB12	I 060473	SVPC11	3190/8250	pCR3.1	F-M	Zambia	D	AY423984	2
ZM109F.PB4	I 060474	SVPC13	3191/8251	pCR3.1	M-F	Zambia	D	AY424138	2
ZM135M.PL10a	I 060475	SVPC15	3120/8180	pCR3.1	F-M	Zambia	D	AY424079	2
CAP45.2.00.G3	I 060476	SVPC16	3115/8638	pcDNA 3.1/V5-HIS TOPO®	M-F	South Africa	E	DQ495682	1
CAP210.2.00.E8	I 060477	SVPC17	3206/8729	pcDNA 3.1/V5-HIS TOPO®	M-F	South Africa	E	DQ495683	1

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 E: Drs. L. Morris, K. Misana and D. Montefiori

F-M: Female-male
 M-F: Male-Female