

**Table S2. Descriptions of the 142 strains of *Cryptococcus neoformans* var. *grubii* used in this study.**

Strain	Geographic origin	Source	Year	Mating type	VN type	Other strains with the same genotype (countries where the genotype was isolated) <sup>a</sup>	Reference
Bt1	Botswana	CSF <sup>b</sup> , HIV+ <sup>c</sup>	1999	α	VNB		(10)
Bt27	Botswana	CSF, HIV+	2000	α	VNB		(10)
Bt24	Botswana	CSF, HIV+	2000	<b>a</b>	VNB		(10)
Bt206	Botswana	CSF, HIV+	2002	<b>a</b>	VNB		(10)
Bt35	Botswana	CSF, HIV+	2000	α	VNB		(10)
Bt63	Botswana	CSF, HIV+	2000	<b>a</b>	VNB		(10)
Bt100	Botswana	CSF, HIV+	2001	α	VNI		(10)
Bt150	Botswana	CSF, HIV+	2001	α	VNI	RSA848, RSA4321, RSA2294 (RSA)	(10)
Bt121	Botswana	CSF, HIV+	2002	α	VNI	RSA2960, RSA5084, RTC5, RTC6 (RSA)	(10)
Bt15	Botswana	CSF, HIV+	2000	α	VNI		(10)
Bt85	Botswana	CSF, HIV+	2001	<b>a</b>	VNB		(10)
Bt9	Botswana	CSF, HIV+	1999	α	VNI		(10)
A1-35-8	North Carolina, USA	pigeon excreta	2002	α	VNI	C23, WM148, H99, Arg1366, Mal 120, Fr1 (Argentina, Australia, France, Malawi, USA)	(10)
C23	North Carolina, USA	bronchial wash, HIV- <sup>c</sup>	2001	α	VNI	A1-35-8, WM148, H99, Arg1366, Mal 120, Fr1 (Argentina, Australia, France, Malawi, USA)	(10)
WM148	Australia	CSF	1995	α	VNI	C23, A1-35-8, H99, Arg1366, Mal 120, Fr1 (Argentina, Australia, France, Malawi, USA)	(16)
Br795	Brazil		1998	α	VNI	RTC1, Gb118, RSA1054, Ug2471, In2629, Blg10, Tn10 (Belgium,	(10)

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						Botswana, Brazil, India, Tanzania, RSA, Uganda)						
H99	North Carolina, USA	Clinical		α	VNI	C23, WM148, Arg1366, Mal 120, Fr1 (Argentina, Australia, France, Malawi, USA)		(16)				
A5-35-17	North Carolina, USA	pigeon excreta	2002	α	VNI	D16-11, C8, Jo278, Jp1086, Mal 212, Bt134, It743, CHC30, Blg7 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)		(10, 38)				
C8	North Carolina, USA	CSF, HIV+	2001	α	VNI	D16-11, A5-35-17, Jo278, Jp1086, Mal 212, Bt134, It743, CHC30, Blg7 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)		(10, 38)				
A2-102-5	Texas, USA	pigeon excreta	2003	α	VNI	D17-1, D17-4, D16-10 (RSA)		(10)				
A3-1-1	North Carolina, USA	pigeon excreta	2002	α	VNI	D16-1, RSA1842, RSA2299, Pr284-2, Pr68, It754, Blg12, Fr5 Ug2459 (Belgium, France, Italy, RSA, Uganda)		(10)				
A4-1-12	North Carolina, USA	pigeon excreta	2002	α	VNI	Fr4 (France)		(10)				
M9	Malawi	CSF, blood, HIV+		α	VNI	In2637 (India)		(10)				
Ug2471	Uganda	CSF, HIV+	2001	α	VNI	RTC1, Gb118, RSA1054, In2629, Blg10, Tn10, Br795 (Belgium, Botswana, Brazil, India, Tanzania, RSA)		(10)				
Th84	Thailand	blood, HIV+	1997	α	VNI	Ug2463 (Uganda)		(10)				
Th104	Thailand	blood, HIV+	1997	α	VNI	RSA2297, Mal 104, Tn148 (Malawi, RSA, Thailand, Tanzania)		(10)				
125.91	Tanzania	CSF, HIV+		α	VNI			(11, 41)				
C26	North Carolina, USA	Blood, HIV+	2001	α	VNI			(10)				

Strain	Geographic origin	Source	Year	Mating type	VN type	Other strains with the same genotype		Reference
						(countries where the genotype was isolated) <sup>a</sup>		
C27	North Carolina, USA	CSF, cancer	2001	α	VNI	In2632, Za1345, RSA1105 (DRC <sup>d</sup> , India, RSA)		(10)
A4-34-6	North Carolina, USA	pigeon excreta	2003	α	VNI			(10)
8-1	North Carolina, USA	Organ transplant		α	VNII			(14)
C16	North Carolina, USA	sputum, HIV-	2001	α	VNII			(10)
C2	North Carolina, USA	bronchial wash, HIV-	2002	α	VNII			(10)
C44	North Carolina, USA	CSF, HIV-	2002	α	VNII			(10)
A7-35-23	North Carolina, USA	pigeon excreta	2003	α	VNII			(10)
C45	North Carolina, USA	sputum, HIV-	2001	α	VNII			(10)
WM626	Australia	CSF	1995	α	VNII			(16)
RSA1684	Limpopo Pr., RSA <sup>d</sup>	Clinical	2006	α	VNII	RSA1831 (RSA)		This study
RSA1831	Limpopo Pr., RSA	Clinical	2006	α	VNII	RSA1684 (RSA)		This study
RSA1054	Limpopo Pr., RSA	Clinical	2006	α	VNI	RTC9, Gb118, RTE-ALL, Ug2471, In2629, Blg10, Tn10, Br795 (Belgium, Botswana, Brazil, India, Tanzania, RSA, Uganda)		This study
RSA1105	Limpopo Pr., RSA	Clinical	2006	α	VNI	C27, In2632, Za1345 (DRC, India, RSA)		This study
RSA1271	Limpopo Pr. <sup>d</sup> , RSA	Clinical	2006	α	VNI	RSA1442, RSA3796 (RSA)		This study
RSA1284	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study
RSA1332	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study
RSA1354	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study
RSA1442	Limpopo Pr., RSA	Clinical	2006	α	VNI	RSA1271, RSA3796 (RSA)		This study

Strain	Geographic origin	Source	Year	Mating type	VN type	Other strains with the same genotype (countries where the genotype was isolated) <sup>a</sup>		Reference
						(countries where the genotype was isolated) <sup>a</sup>		
RSA1691	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study
RSA1842	Limpopo Pr., RSA	Clinical	2006	α	VNI	A3-1-1, D16-1, RSA2299, RSA480, Pr284-2, Pr68-1, It754, Blg12, Fr5 (Belgium, France, Italy, RSA, Uganda, USA)	This study	
RSA2297	Limpopo Pr., RSA	Clinical	2006	α	VNI	Th104, Mal 104, Tn148 (Malawi, RSA, Tanzania, Thailand)		This study
RSA2299	Limpopo Pr., RSA	Clinical	2006	α	VNI	A3-1-1, D16-1, RSA1842, RSA480, Pr284-2, Pr68-1, It754, Blg12, Fr5 (Belgium, France, Italy, RSA, Uganda, USA)	This study	
RSA263	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study
RSA2960	Limpopo Pr., RSA	Clinical	2006	α	VNI	Bt121, RSA5084, RTC5, RTC6 (Botswana, RSA)		This study
RSA3751	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study
RSA3796	Limpopo Pr., RSA	Clinical	2006	α	VNI	RSA1271, RSA1442 (RSA)		This study
RSA4068	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study
RSA4389	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study
RSA480	Limpopo Pr., RSA	Clinical	2006	α	VNI	A3-1-1, D16-1, RSA1842, RSA2299, Pr284-2, Pr68-1, It754, Blg12, Fr5 (Belgium, France, Italy, RSA, Uganda, USA)	This study	
RSA5084	Limpopo Pr., RSA	Clinical	2006	α	VNI	Bt121, RSA2960, RTC5, RTC6 (Botswana, RSA)		This study
RSA730	Limpopo Pr., RSA	Clinical	2006	α	VNI	A5-35-17, C8, D16-11, Jo278-1, Jp1086, Mal 212, It743, CHC30, Blg7 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)	This study	
RSA731	Limpopo Pr., RSA	Clinical	2006	α	VNI	A5-35-17, C8, D16-11, Jo278-1, Jp1086, Mal 212, It743, CHC30, Blg7 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)	This study	
RSA1343	Limpopo Pr., RSA	Clinical	2006	α	VNI			This study

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				type			
RSA3042	Limpopo Pr., RSA	Clinical	2006	α	VNI		This study
RSA4129	Limpopo Pr., RSA	Clinical	2006	α	VNI		This study
RSA1082	Limpopo Pr., RSA	Clinical	2006	α	VNB		This study
RSA6618	Limpopo Pr., RSA	Clinical	2006	α	VNB		This study
RSA3768	Limpopo Pr., RSA	Clinical	2006	a	VNB		This study
RSA116	Limpopo Pr., RSA	Clinical	2006	α	VNI		This study
RSA209	Limpopo Pr., RSA	Clinical	2006	α	VNI		This study
RSA2294	Limpopo Pr., RSA	Clinical	2006	α	VNI	Bt150, RSA848, RSA4321 (Botswana, RSA)	This study
RSA4321	Limpopo Pr., RSA	Clinical	2006	α	VNI	Bt150, RSA848, RSA2294 (Botswana, RSA)	This study
RSA848	Limpopo Pr., RSA	Clinical	2006	α	VNI	Bt150, RSA2294, RSA4321 (Botswana, RSA)	This study
RSA2296	Limpopo Pr., RSA	Clinical	2006	α	VNI		This study
RSA314	Limpopo Pr., RSA	Clinical	2006	α	VNI		This study
RSA3573	Limpopo Pr., RSA	Clinical	2006	α	VNB		This study
RSA5433	Limpopo Pr., RSA	Clinical	2006	α	VNB		This study
RSA756	Limpopo Pr., RSA	Clinical	2006	α	VNB		This study
RSA3144	Limpopo Pr., RSA	Clinical	2006	α	VNB		This study
RTC1	Botswana	Clinical	2007	α	VNI	Br795, Ug2458, Gb118, Blg10, Tn10, Bt, In2629, RSA1054 (Belgium, Botswana, Brazil, India, RSA, Tanzania, Uganda)	This study
RTC2	Botswana	Clinical	2007	α	VNB	RTC4 (Botswana)	This study
RTC3	Botswana	Clinical	2007	α	VNB		This study

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						(countries where the genotype was isolated) <sup>a</sup>		
RTC4	Botswana	Clinical	2007	α	VNB	RTC2 (Botswana)		This study
RTC5	Botswana	Clinical	2007	α	VNI	Bt121, RSA2960, RSA5084, RTC6 (Botswana, RSA)		This study
RTC6	Botswana	Clinical	2007	α	VNI	Bt121, RSA2960, RSA5084, RTC5 (Botswana, RSA)		This study
RTC9	Botswana	Clinical	2007	α	VNI	RSA1054, Gb118, RTE-ALL, Ug2471, In2629, Blg10, Tn10, Br795 (Belgium, Botswana, Brazil, India, Tanzania, RSA, Uganda)		This study
D16-1	Durban, RSA	pigeon excreta	2007	α	VNI	A3-1-1, D16-1, RSA2299, RSA480, Pr284-2, Pr68-1, It754, Blg12, Fr5 (Belgium, France, Italy, RSA, USA)		This study
D16-2	Durban, RSA	pigeon excreta	2007	α	VNI	D16-4, D16-16, D16-7, D17-2, D17-5, D17-7 (RSA)		This study
D16-3	Durban, RSA	pigeon excreta	2007	α	VNI	A3-1-1, D16-14, D16-1, RSA2299, RSA480, Pr284-2, Pr68-1, It754, Blg12, Fr5 (Belgium, France, Italy, RSA, USA)		This study
D16-4	Durban, RSA	pigeon excreta	2007	α	VNI	D16-2, D16-16, D16-7, D17-2, D17-5, D17-7 (RSA)		This study
D16-5	Durban, RSA	pigeon excreta	2007	α	VNI			This study
D16-6	Durban, RSA	pigeon excreta	2007	α	VNI	A5-35-17, C8, Jo278, Jp1086, Mal 212, Bt134, It743, Blg7, CHC30 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)		This study
D16-7	Durban, RSA	pigeon excreta	2007	α	VNI	D16-2, D16-16, D16-4, D17-2, D17-5, D17-7 (RSA)		This study
D16-9	Durban, RSA	pigeon excreta	2007	α	VNI	A5-35-17, C8, Jo278, Jp1086, Mal 212, Bt134, It743, CHC30, Blg7 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)		This study
D16-10	Durban, RSA	pigeon excreta	2007	α	VNI	A2-102-5, D17-1, D17-4 (RSA, USA)		This study
D16-11	Durban, RSA	pigeon excreta	2007	α	VNI	A5-35-17, C8, Jo278, Jp1086, Mal 212, Bt134, It743, Blg7, CHC30 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)		This study

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						(countries where the genotype was isolated) <sup>a</sup>		
D16-12	Durban, RSA	pigeon excreta	2007	α	VNI	A5-35-17, C8, Jo278, Jp1086, Mal 212, Bt134, It743, Blg7, CHC30 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)	This study	
D16-13	Durban, RSA	pigeon excreta	2007	α	VNI	A5-35-17, C8, Jo278, Jp1086, Mal 212, Bt134, It743, Blg7, CHC30 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)	This study	
D16-14	Durban, RSA	pigeon excreta	2007	α	VNI	A3-1-1, D16-1, RSA2299, RSA480, Pr284-2, Pr68, it754, Blg12 (Belgium France, Italy, RSA, Uganda, USA)	This study	
D16-16	Durban, RSA	pigeon excreta	2007	α	VNI	D16-2, D16-4, D16-7, D17-2, D17-5, D17-7 (RSA)	This study	
D17-1	Durban, RSA	pigeon excreta	2007	α	VNI	A2-102-5, D16-10, D17-4 (RSA, USA)	This study	
D17-2	Durban, RSA	pigeon excreta	2007	α	VNI	D16-2, D16-16, D16-7, D17-4, D17-5, D17-7 (RSA)	This study	
D17-3	Durban, RSA	pigeon excreta	2007	α	VNI	A5-35-17, C8, Jo278, Jp1086, Mal 212, Bt134, It743, Blg7, CHC30 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)	This study	
D17-4	Durban, RSA	pigeon excreta	2007	α	VNI	A2-102-5, D16-10, D17-1 (RSA, USA)	This study	
D17-5	Durban, RSA	pigeon excreta	2007	α	VNI	D16-2, D16-16, D16-7, D17-4, D17-5, D17-2, D17-7 (RSA)	This study	
D17-7	Durban, RSA	pigeon excreta	2007	α	VNI	D16-2, D16-16, D16-7, D17-4, D17-5, D17-2, D17-7 (RSA)	This study	
Gb118-1	Gaborone, Botswana	pigeon excreta	2007	α	VNI	RSA1054, RTC9, RTE-ALL, Ug2471, In2629, Blg10, Br795, Tn10 (Belgium, Botswana, Brazil, India, Tanzania, RSA, Uganda)	This study	
Gb118-2	Gaborone, Botswana	pigeon excreta	2007	α	VNI	RSA1054, RTC9, RTE-ALL, Ug2471, In2629, Blg10, Br795, Tn10 (Belgium, Botswana, Brazil, India, Tanzania, RSA, Uganda)	This study	
Gb159-1	Gaborone, Botswana	bark, unidentified tree	2007	α	VNI	Gb159-2 (Botswana)	This study	

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						(countries where the genotype was isolated) <sup>a</sup>		
Gb159-2	Gaborone, Botswana	bark, unidentified tree	2007	α	VNI	Gb159-1 (Botswana)		This study
Jo278-1	Johannesburg, RSA	soil contaminated with avian excreta	2007	α	VNI	A5-35-17, C8, Jp1086, Mal 212, Bt134, It743, CHC30, Jo278-2 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)		This study
Jo278-2	Johannesburg, RSA	soil contaminated with avian excreta	2007	α	VNI	A5-35-17, C8, Jp1086, Mal 212, Bt134, It743, CHC30, Jo278-1 (Belgium, Botswana, China, Italy, Japan, Malawi, RSA, USA)		This study
Pr68-1	Parys, RSA	pigeon excreta	2007	α	VNI	A3-1-1, D16-1, RSA2299, RSA480, Pr284-2, It754, Blg12, Fr5 (Belgium, France, Italy, RSA, Uganda, USA)		This study
Pr284-1	Parys, RSA	pigeon excreta	2007	α	VNI			This study
Pr284-2	Parys, RSA	pigeon excreta	2007	α	VNI	A3-1-1, D16-1, RSA2299, RSA480, Pr68-1, It754, Blg12, Fr5 (Belgium, France, Italy, RSA, Uganda, USA)		This study
RTE-ALL	Gaborone, Botswana	pigeon excreta	2007	α	VNI	RSA1054, RTC9, RTE-ALL, Ug2471, In2629, Blg10, Br795, Tn10 (Belgium, Botswana, Brazil, India, Tanzania, RSA, Uganda)		This study
Tu229-1	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu229-6, Tu236-1 (Botswana)		This study
Tu229-6	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu229-1, Tu236-1 (Botswana)		This study
Tu236-1	Tuli block, Botswana	soil under Mopane tree	2007	α	VNB	Tu229-1, Tu229-6 (Botswana)		This study
Tu239-1	Tuli block, Botswana	Mopane bark	2007	α	VNI	Tu-239-2, Tu241-1, Tu241-2 (Botswana)		This study
Tu239-2	Tuli block, Botswana	Mopane bark	2007	α	VNI	Tu-239-1, Tu241-1, Tu241-2 (Botswana)		This study
Tu241-1	Tuli block, Botswana	soil under Mopane tree	2007	α	VNI	Tu-239-1, Tu239-2, Tu241-2 (Botswana)		This study

Strain	Geographic origin	Source	Year	Mating type	VN type	Other strains with the same genotype (countries where the genotype was isolated) <sup>a</sup>		Reference
						(countries where the genotype was isolated) <sup>a</sup>		
Tu241-2	Tuli block, Botswana	soil under Mopane tree	2007	α	VNI	Tu-239-1, Tu239-2, Tu241-1 (Botswana)		This study
Tu248-1	Tuli block, Botswana	Baobab	2007	α	VNB	Tu248-2 (Botswana)		This study
Tu248-2	Tuli block, Botswana	Baobab	2007	α	VNB	Tu248-1 (Botswana)		This study
Tu259-1	Tuli block, Botswana	Mopane bark	2007	α	VNI	Tu259-2 (Botswana)		This study
Tu259-2	Tuli block, Botswana	Mopane bark	2007	α	VNI	Tu259-1 (Botswana)		This study
Tu360-1	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu360-2 (Botswana)		This study
Tu360-2	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu360-1 (Botswana)		This study
Tu369-1	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu369-2, Tu372-1, Tu372-2 (Botswana)		This study
Tu369-2	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu369-1, Tu372-1, Tu372-2 (Botswana)		This study
Tu372-1	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu369-1, Tu369-2, Tu372-1 (Botswana)		This study
Tu372-2	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu369-1, Tu369-2, Tu372-2 (Botswana)		This study
Tu401-1	Tuli block, Botswana	Mopane bark	2007	α	VNB			This study
Tu406-1	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu406-2 (Botswana)		This study
Tu406-2	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu406-2 (Botswana)		This study
Tu416-1	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu416-2 (Botswana)		This study
Tu416-2	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu416-1 (Botswana)		This study
Tu422-1	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu422-2 (Botswana)		This study
Tu422-2	Tuli block, Botswana	Mopane bark	2007	α	VNB	Tu422-2 (Botswana)		This study
Ze90-1	Zeerust, RSA	Eucalyptus bark	2007	α	VNB	Ze90-2, Ze93-1, Ze93-2 (RSA)		This study

Strain	Geographic origin	Source	Year	Mating	VN type	Other strains with the same genotype (countries where the genotype was isolated) <sup>a</sup>	Reference
				type			
Ze90-2	Zeerust, RSA	Eucalyptus bark	2007	α	VNB	Ze90-1, Ze93-1, Ze93-2 (RSA)	This study
Ze93-1	Zeerust, RSA	soil under	2007	α	VNB	Ze90-1, Ze90-2, Ze93-2 (RSA)	This study
		Eucalyptus tree					
Ze93-2	Zeerust, RSA	soil under	2007	α	VNB	Ze90-1, Ze90-2, Ze93-1 (RSA)	This study
		Eucalyptus tree					

<sup>a</sup> Other strains with the same genotype. Because of space considerations, only representative strains are included. A complete list of each global strain and its origin is provided in ref. 10 and 38.

<sup>b</sup> CSF, cerebrospinal fluid.

<sup>c</sup> HIV+, HIV-infected; HIV-, non-HIV-infected.

<sup>d</sup> RSA, Republic of South Africa; DRC, Democratic Republic of the Congo, Pr., Province.