

Table S2. Sources of the proteins. Sources of each protein used in the study are listed. The referenced studies are regarding cryptococci or chitin deacetylase.

Phylogenetic group ^a	Protein ID ^b	Accession Numbers ^c	Source
Group01	Cnh2476	XP_012049409.1	Biondo et al. (2005)
Group01	CnjCP76	XP_570200.1	NCBI
Group01	CgwR4D0	XP_003193716.1	NCBI
Group01	CacHZ44	XP_018995941.1	NCBI
Group01	Ta2T396	XP_014180455.1	NCBI
Group02	Rs2XH4	AAX11701.1	Grifoll-Romero et al. (2018)
Group02	PbP4U2	BAB03595.1	Grifoll-Romero et al. (2018)
Group03	Ar0325	CDA_AMYRO	NCBI
Group03	RcUMZ0	ABU25260.1	NCBI
Group03	GbJ2N6	AAN65362.1	Grifoll-Romero et al. (2018)
Group04	CnhVND2	XP_012049402.1	Levitz et al. (2001)
Group04	CgwR4C1	XP_003193766.1	NCBI
Group04	CnjKIC2	XP_570561.1	NCBI
Group05	KpcHZD0	XP_019009862.1	NCBI
Group05	KdcZU79	XP_018259205.1	NCBI
Group05	KbcGC05	XP_019049621.1	NCBI
Group05	CnjKFG8	XP_571516.1	Baker et al. (2007)
Group05	CnhVPD7	XP_012050538.1	NCBI
Group05	CgwR8B7	XP_003194854.1	NCBI
Group05	ScP453	AAF75280.1	Grifoll-Romero et al. (2018)
Group06	Scs6703	NP_013411.1	NCBI
Group06	Scs6702	NP_013410.1	NCBI
Nongroup ^d	AraC1T7	SFV42090.1	Grifoll-Romero et al. (2018)
Nongroup	Ht7119	BAA33543.1	Aragunde et al. (2018)
Nongroup	Aa2194	BAA13434.2	PDB ^e
Nongroup	Sl14413	AAC06115.2	Aragunde et al. (2018)
Nongroup	Bss4928	BAA23389.1	Aragunde et al. (2018)
Nongroup	Baa1Z49	AAT29524.1	Aragunde et al. (2018)
Nongroup	Bca1EK9	AAP08931.1	PDB
Nongroup	BaaR803	AAT29230.1	Aragunde et al. (2018)
Group07	SmuDV82	AAN58357.1	Aragunde et al. (2018)
Group07	EraZEZ9	ACR76120.1	Aragunde et al. (2018)
Group07	BcqJ460	ACM13199.1	Aragunde et al. (2018)
Group07	EhhLSF0	XP_656356.1	Aragunde et al. (2018)
Group07	SprDP63	AAL00137.1	Aragunde et al. (2018)
Group08	Sm2963	WP_003532851.1	Grifoll-Romero et al. (2018)
Group08	Bs4675	CAA27349.1	PDB
Group08	Be0352	WP_016848466.1	PDB
Group08	Ng0354	CAA60878.1	PDB
Group08	Bs0353	AAB06560.1	PDB
Group08	Rl4676	CAA27352.1	PDB
Group08	Rlv4339	CAA68620.1	PDB
Group08	Rlp4150	AAA98210.1	PDB
Group08	Sfn0355	WP_010875356.1	PDB
Group08	Ac7740	WP_012172340.1	PDB
Group08	Mj2845	WP_010913829.1	PDB
Group09	Bb8015	WP_033465533.1	Aragunde et al. (2018)

Group09	Eck5906	AAC74108.1	Aragunde et al. (2018)
Group09	AahHJW8	ABQ02266.1	Aragunde et al. (2018)
Group09	AdkRCK9	ACX51986.1	Aragunde et al. (2018)
Group10	Bca1IM3	AAP07401.1	Aragunde et al. (2018)
Group10	BaaRI55	AAT29421.1	Aragunde et al. (2018)
Group11	Sp3842	NP_001342829.1	NCBI
Group11	SoyRII5	XP_013016981.1	NCBI
Group11	ScoW089	XP_013024037.1	NCBI
Group11	SjyK332	XP_002174182.1	NCBI
Group12	AnfVD85	XP_659456.1	NCBI
Group12	PsTHR9	KY024221.1	NCBI
Group12	PfwWXC1	XP_007836581.1	NCBI
Group12	TbcAM78	XP_003016479.1	NCBI
Group12	AnfAQQ0	XP_682649.1	Grifoll-Romero et al. (2018)
Group12	TbcB5F9	XP_003010085.1	NCBI
Group12	CIDWK3	AAT68493.1	NCBI
Nongroup	Po7K5U6	XP_003712529.1	NCBI
Group13	FgpR JW3	XP_011321484.1	NCBI
Group13	FlDDS6	KPA40075.1	NCBI
Group13	FfuEMK4	XP_023435681.1	NCBI
Group13	FpcV351	XP_009251560.1	NCBI
Group13	FvTBP1	XP_025586491.1	NCBI
Group14	Pc1EY19	XP_018136027	Grifoll-Romero et al. (2018)
Group14	FgpRR40	XP_011326160.1	NCBI
Group14	FlDHU7	KPA45975.1	NCBI
Group14	FfY0Y7	KLO89559.1	NCBI
Group15	BcbXWF8	XP_001554986.1	NCBI
Group15	Ss1E5R7	XP_001598553.1	NCBI
Group15	CgcHA51	XP_001229419.1	NCBI
Group15	Po7N4F9	XP_003712634.1	NCBI
Group15	FgpRP90	XP_011324448.1	NCBI
Group15	Po7V4F3	XP_016845950.1	NCBI
Group15	FlF4C1	KPA45839.1	NCBI
Group15	FpcUNZ2	XP_009257203.1	NCBI
Group15	FvTH61	XP_025593054.1	NCBI
Group15	PgA708	XP_030979617.1	NCBI
Group16	PnsUFD5	XP_001799819.1	NCBI
Group16	PnsUIR5	XP_001798667.1	NCBI
Group16	PnsUKU4	XP_001797954.1	NCBI
Group16	PnsU8R2	XP_001802089.1	NCBI
Group16	PnsTZN1	XP_001805210.1	NCBI
Group17	AorUI04	XP_023090511.1	NCBI
Group17	AncQVC6	XP_001394100.1	NCBI
Group17	AfaWMC1	XP_750931.1	NCBI
Group17	AfnDNA1	XP_001258169.1	NCBI
Group18	BcbJY64	XP_024551837.1	NCBI
Group18	Bg6VN0	AAK84438.1	NCBI
Group18	BcbJCN4	XP_001560867.1	NCBI
Group18	Ss1E4P3	XP_001598179.1	NCBI
Group18	SscEN50	XP_001592508.1	Grifoll-Romero et al. (2018)
Group19	FvXGD4	BAE92728.1	Grifoll-Romero et al. (2018)

Group19	PgfK3D7	XP_003323413.1	NCBI
Group19	CnhVYM3	XP_012053383.1	NCBI
Group19	CgwRFT1	XP_003197451.1	NCBI
Group19	CnjQ5KG	XP_571200.1	Baker et al. (2007)
Group19	PgcNXY3	XP_003338851.2	NCBI
Group19	PgcK0A3	XP_003322147.2	NCBI
Group20	SwaKR43	ACA84302.1	Grifoll-Romero et al. (2018)
Group20	SbD2G6	WP_011846319.1	Grifoll-Romero et al. (2018)
Group20	VcKSH6	WP_001881046.1	Grifoll-Romero et al. (2018)
Group20	VpP4T5	BAF65669.1	Grifoll-Romero et al. (2018)
Group21	EcgSU65	NP_586357.1	NCBI
Group21	ErsAQ65	XP_009265516.1	NCBI

^aPhylogenetic group refers to classifying groups by phylogenetic analysis and based on other properties like domains, signal peptide, transmembrane, and GPI (glycosylphosphatidylinositol)-anchor.

^bThese ID are named by mixing genus name, species name, and uniprot code and used in the phylogenetic tree.

^cGenbank accession number.

^dUnlike other proteins, these proteins do not form a group. Proteins lack bootstrap values and common characteristics.

^ePDB refers to protein data bank; information from the website <https://www.rcsb.org/> was used to identify the proteins in other organisms that shared the same PDB sequences (Berman *et al.*, 2000).