

SUPPLEMENTARY TABLE II. Accession numbers for Dam1/DASH complex components in 26 fungi (see SUPPLEMENTARY TABLE I for taxonomy). Species were examined for the presence or absence of KIN proteins by blastp or tblastn searches with various settings. Dam1/DASH proteins are overall conserved in many fungal genomes when searching with yeast, *Neurospora* or human homologs. In some cases, homologs were not identified in a specific reference genome, and in those cases the predicted protein of the nearest relative was included in the SUPPLEMENTARY TABLES (for example, *Zymoseptoria tritici* and *Z. brevis*). In many cases, annotations are clearly incorrect, and not all cases can be resolved as reliable transcription data are lacking in many cases (absence of RNA-sequence data or low expression that makes it impossible to define likely transcription or translation units). “None” means that no clear homolog was found by searches based on sequence identity, but it does not exclude the possibility that functional homologs exist

Name	Dam1	Duo1	Dad1	Dad2	Dad3
<i>Neurospora crassa</i> (NEUCR)	XP_959225.1	Q7S6G5	EAA27616.1	EAA27389.1	EAA27241.1
<i>Podospora anserina</i> (PODAN)	CDP29947.1	CDP28374.1	XP_001909901.1	XP_001909624.1	XP_001909675.1
<i>Magnaporthe oryzae</i> (MAGO7)	XP_003718096.1	XP_003709280.1	XP_003719975.1	XP_003709332.1	XP_003709751.1
<i>Fusarium graminearum</i> (GIBZE)	XP_011327796.1	XP_011328200.1	XP_011315974.1	XP_011317361.1	XP_011316340.1
<i>Trichoderma reesei</i> (TRIQM)	XP_006965750.1	ETS04604.1	EHK24392.1 ¹	XP_006965936.1	XP_006965949.1
<i>Metarhizium album</i> (META)	KJK84107.1	KHN99118.1	KHO01964.1	KHN98314.1	XP_007812006.1
<i>Botryotinia fuckeliana</i> (BOTFB)	EMR82947.1	CCD52230.1	XP_001595968.1	XP_001550058.1	EMR80573.1 ²
<i>Aspergillus nidulans</i> (ANIDU)	CBF75560.1	XP_662565.1	CBF84212.1	CBF87576.1	XP_657747.1
<i>Talaromyces marneffei</i> (TALMA)	KFX46736.1	XP_002143657.1	XP_002145406.1	XP_002151802.1	KFX52470.1
<i>Arthroderma benhamiae</i> (ARTBC)	XP_002847704.1	XP_003016072.1	XP_003015179.1	XP_003011082.1	XP_003010368.1
<i>Histoplasma capsulatum</i> (HISTO)	XP_001539773.1	XP_001543051.1	EEH06857.1	EER37697.1	XP_001543805.1
<i>Coccidioides immitis</i> (COCIM)	XP_001247932.1	XP_001244138.1	XP_001246484.1	XP_001243315.1	XP_012213630.1
<i>Zymoseptoria brevis</i> (ZYMBR)	KJX96210.1	KJX92309.1	XP_003849566.1	XP_003848019.1	XP_003849670.1
<i>Leptosphaeria maculans</i> (LEPMJ)	XP_003841515.1	XP_003834405.1	XP_003837205.1	XP_003835306.1	XP_003835747.1
<i>Pyronema omphalodens</i> (PYROO)	CCX15868.1	CCX32214	CCX33114.1	CCX10451.1	CCX33019.1
<i>Candida albicans</i> (CANAW)	XP_723523.1	XP_711555.1	EEQ41894.1	EEQ45932.1	EEQ43686.1
<i>Saccharomyces cerevisiae</i> (SACCE)	NP_011628.4	P53168.1	Q12248.1	P36162.1	P69850.1
<i>Schizosaccharomyces pombe</i> (SCHPO)	NP_594056.1	O74372.2	NP_594045.2	NP_593918.1	NP_001018295.1
<i>Coprinopsis cinerea</i> (COPC7)	XP_001832368.1	XP_001830586.2	XP_002910662.1	XP_002911672.1	XP_001833031.1
<i>Rhizoctonia solani</i> (RHIZ)	EUC65446.1	KDN45556.1	CEL62508.1	CEL58869.1	EUC59715.1
<i>Cryptococcus neoformans</i> (CRYNJ)	XP_012049775.1	XP_570539.1	XP_571143.1	XP_778299.1	XP_777259.1
<i>Ustilago maydis</i> (USTMA)	XP_011388250.1	XP_011388282.1	XP_011391933.1	XP_011386438.1	XP_011390113.1
<i>Puccinia graminis</i> (PUCGT)	XP_003328704.1	XP_003325693.1	XP_003324876.1	XP_003330783.2	XP_003330645.1
<i>Batrachochytrium dendrobatidis</i> (BATDE)	None	None	None	None	None
<i>Rozella allomycis</i> (ROZAC)	None	None	None	None	None
<i>Enzaphalitozoon cuniculi</i> (ENCUU)	None	None	None	None	None

Name	Dad4	Ask1	Hsk3	Spc19	Spc34
<i>Neurospora crassa</i> (NEUCR)	EDO65111.1	EAA32681.2	EAA35659.1	XP_965199.1	EAA30398.1
<i>Podospora anserina</i> (PODAN)	XP_001909274.1	CDP26951.1	None	XP_003437499.1	CDP30068.1
<i>Magnaporthe oryzae</i> (MAGO7)	XP_003711998.1	XP_003715340.1	XP_003720933.1	EAQ71522.1	XP_003718079.1
<i>Fusarium graminearum</i> (GIBZE)	XP_011325051.1	XP_011327896.1	EYB26433.1	XP_009259365.1	XP_011325641.1
<i>Trichoderma reesei</i> (TRIQM)	XP_006962168.1	XP_006962294.1	ETR97840.1	XP_006968585.1	XP_006965141.1
<i>Metarhizium album</i> (METAA)	None	KHN98175.1	XP_007807243.1	KHO00270.1	KHN97333.1
<i>Botryotinia fuckeliana</i> (BOTFB)	EMR89988.1	XP_001552958.1	XP_001551691.1	XP_001560225.1	XP_001556019.1
<i>Aspergillus nidulans</i> (ANIDU)	CBF86955.1	XP_658630.1	XP_681988.1	CBF77148.1	CBF84051.1
<i>Talaromyces marneffei</i> (TALMA)	XP_002152784.1	XP_002146276.1	XP_002148861.1	XP_002151698.1	XP_002152566.1
<i>Arthroderma benhamiae</i> (ARTBC)	XP_002849763.1	XP_003012140.1	EEQ30237.1	XP_003010731.1	XP_003014688.1
<i>Histoplasma capsulatum</i> (HISTO)	XP_001537200.1 ¹	EER40707.1	P_001539596.1	XP_001539915.1	EER37478.1
<i>Coccidioides immitis</i> (COCIM)	None	XP_001242959.1	XP_012213808.1	XP_003065434.1	XP_001246715.1
<i>Zyoseptoria brevis</i> (ZYMBR)	XP_003855496.1	XP_003848898.1	KJX99110.1	XP_003847652.1	XP_003851468.1
<i>Leptosphaeria maculans</i> (LEPMJ)	XP_003843253.1	XP_003842788.1	XP_003836400.1	XP_003838452.1	XP_003837751.1
<i>Pyronema omphalodens</i> (PYROO)	CCX31290.1	CCX04409.1	CCX33755	CCX04934.1	CCX15587.1
<i>Candida albicans</i> (CANAW)	KHC54824.1	EEQ45346.1	XP_722392.1	EEQ42774.1	XP_717193.1
<i>Saccharomyces cerevisiae</i> (SACCE)	P69851.1	P35734.2	P69852.1	Q03954.1	P36131.1
<i>Schizosaccharomyces pombe</i> (SCHPO)	XP_001713149.1	NP_595657.1	NP_588279.1	XP_001713170.1	NP_594287.1
<i>Coprinopsis cinerea</i> (COPC7)	XP_001837076.1	XP_001829416.1	None	XP_001839118.1	XP_001830491
<i>Rhizoctonia solani</i> (RHIZS)	CCO34931.1	CEL56063.1	None	CEL59271.1	ELU41199.1
<i>Cryptococcus neoformans</i> (CRYNJ)	XP_012052720.1	XP_571386.1	AAW44366.1	XP_570613.1	AAW44643.1
<i>Ustilago maydis</i> (USTMA)	XP_011386747.1	XP_011386979.1	KIS67818.1	XP_011389863.1	CCF48276
<i>Puccinia graminis</i> (PUCGT)	XP_003889023.1	XP_003333515.1	None	EFP77893.2	EFP77565.2
<i>Batrachochytrium dendrobatidis</i> (BATDE)	None	None	None	None	None
<i>Rozella allomycis</i> (ROZAC)	None	None	None	None	EPZ34028
<i>Enzaphalitozoon cuniculi</i> (ENCUU)	None	None	None	None	None

¹ Predicted protein is too long.

² Likely not a true homolog.