

Supplementary Table 15 Comparison of proteins containing putative DNA binding domains

PFAM domain	hmm name	hmm description	A. niger	A nidulans	A fumigatus	A oryzae	N crassa	S cerevisiae
PF00172	Zn_clus	Fungal Zn(2)-Cys(6) binuclear cluster domain	296	216	188	176	89	53
PF04082	Fungal_trans	Fungal specific transcription factor domain	226	168	124	182	61	26
PF0172+04082			146	95	83	86	44	26
PF00096	zf-C2H2	Zinc finger, C2H2 type	66	60	52	42	54	38
PF00642	zf-CCCH	Zinc finger C-x8-C-x5-C-x3-H type (and similar)	14	10	12	10	10	7
PF00170	bZIP	bZIP transcription factor	13	9	12	7	9	11
PF00249	myb_DNA-binding	Myb-like DNA-binding domain	13	18	16	14	16	14
PF00098	zf-CCHC	Zinc knuckle	12	22	12	13	10	10
PF00533	BRCT	BRCA1 C Terminus (BRCT) domain	12	10	11	11	10	10
PF02178	AT_hook	AT hook motif	11	6	7	7	16	6
PF00010	HLH	Helix-loop-helix DNA-binding domain	10	12	9	10	14	7
PF01336	tRNA_anti	OB-fold nucleic acid binding domain	10	9	9	9	11	8
PF02037	SAP	SAP domain	10	7	7	7	5	5
PF00046	homeobox	Homeobox domain	8	6	6	7	7	8
PF00498	FHA	FHA domain	8	8	6	8	8	14
PF05225	HTH_psq	helix-turn-helix, Psq domain	8	21	30	1	2	0
PF00320	GATA	GATA zinc finger	7	7	7	7	6	10
PF00439	bromodomain	Bromodomain	7	6	6	5	6	10
PF00505	HMG_box	HMG (high mobility group) box	7	7	7	3	11	7
PF02463	SMC_N	RecF/RecN/SMC N terminal domain	7	7	7	7	7	7
PF00488	MutS_V	MutS domain V	6	4	6	5	5	6
PF00493	MCM	MCM2/3/5 family	6	6	6	6	7	6
PF01529	zf-DHHC	DHHC zinc finger domain	6	6	5	3	5	7
PF00250	Fork_head	Fork head domain	5	4	4	4	3	4
PF01753	zf-MYND	MYND finger	5	2	3	2	5	1
PF02146	SIR2	transcriptional regulator, Sir2 family	5	5	6	6	7	5
PF00136	DNA_pol_B	DNA polymerase family B	4	4	4	4	4	4
PF00730	HhH-GPD	HhH-GPD superfamily base excision DNA repair protein	4	4	3	3	6	4
PF01096	TFIIS	Transcription factor S-II (TFIIS)	4	1	4	4	3	4
PF01624	MutS_I	MutS domain I	4	4	4	4	4	4
PF01920	KE2	KE2 family protein	4	4	4	3	4	4
PF02292	APSES	APSES domain	4	4	4	2	4	4
PF02854	MIF4G	MIF4G domain	4	4	4	4	4	6
PF00447	HSF_DNA-bind	HSF-type DNA-binding domain	3	3	4	3	3	5
PF03178	CPSF_A	CPSF A subunit region	3	3	4	3	3	2
PF04675	DNA_ligase_A_N	DNA ligase N terminus	3	2	2	2	3	1
PF05190	MutS_IV	MutS family domain IV	3	2	3	3	3	4
PF05224	NDT80_PhoG	NDT80 / PhoG like DNA-binding family	3	2	3	2	3	1
PF00319	SRF-TF	SRF-type transcription factor (DNA-binding and dimerisation domain)	2	2	3	2	2	4
PF00565	SNase	Staphylococcal nuclease homologue	2	2	2	2	2	1
PF00633	HHH	Helix-hairpin-helix motif	2	3	2	1	2	1
PF01388	ARID	ARID/BRIGHT DNA binding domain	2	2	2	2	3	2
PF01422	zf-NF-X1	NF-X1 type zinc finger	2	1	2	1	1	1
PF01424	R3H	R3H domain	2	3	3	3	3	2
PF01997	Translin	Translin family	2	2	2	1	2	0
PF02735	ku	Ku70/Ku80 beta-barrel domain	2	2	2	0	2	2
PF02891	zf-MIZ	MIZ zinc finger	2	2	2	1	2	2
PF07529	HAS	HAS	2	2	2	2	2	2
PF08265	YL1_C	YL1 nuclear protein C-terminal domain	2	2	2	2	2	2
PF00165	HTH_AraC	transcriptional regulator, araC family	1	1	1	2	0	0
PF00352	TBP	Transcription factor TFIID (or TATA-binding protein, TBP)	1	1	1	1	1	1
PF00436	SBS	Single-strand binding protein family	1	1	1	1	1	1
PF00649	Copper-fist	Copper fist DNA binding domain	1	1	2	0	2	3
PF01035	DNA_binding_1	6-O-methylguanine DNA methyltransferase, DNA binding domain	1	1	2	1	0	1
PF01285	TEA	TEA domain	1	1	1	3	0	1
PF01381	HTH_3	Helix-turn-helix	1	1	1	1	1	1
PF01426	BAH	BAH domain	1	2	3	0	3	5
PF01833	TIG	IPT/TIG domain	1	1	1	1	1	2
PF01984	dsDNA_bind	Double-stranded DNA-binding domain	1	1	1	0	1	1
PF02045	CBFB_NFYA	CCAAT-binding transcription factor (CBF-B/NF-YA) subunit B	1	1	1	1	1	1
PF02257	RFX_DNA_binding	RFX DNA-binding domain	1	1	1	1	1	1
PF02671	PAH	Paired amphipathic helix repeat	1	1	1	2	1	1
PF02755	RPEL	RPEL repeat	1	0	1	1	0	0
PF02765	Telo bind	Telomere-binding protein alpha subunit, central domain	1	1	1	1	1	0
PF02791	DDT	DDT domain	1	1	1	1	1	2
PF02805	Ada_Zn_binding	Metal binding domain of Ada	1	1	1	2	0	0

PF02919	Topoisom_I_N	Eukaryotic DNA topoisomerase I, DNA binding fragment	1	1	1	1	1	1
PF03126	Plus-3	Plus-3 domain	1	1	1	1	1	1
PF03871	RNA_pol_Rpb5_N	RNA polymerase Rpb5, N-terminal domain	1	1	0	0	1	1
PF04152	Mre11_DNA_bind	Mre11 DNA-binding presumed domain	1	1	1	1	1	1
PF04406	TP6A_N	Type IIB DNA topoisomerase	1	0	0	0	1	1
PF04769	MAT_Alpha1	Mating-type protein MAT alpha 1	1	1	0	1	1	2
PF04921	XAP5	XAP5 protein	1	1	1	1	1	0
PF05181	XPA_C	XPA protein C-terminus	1	1	1	1	1	1
PF05764	YL1	YL1 nuclear protein	1	1	1	1	1	1
PF06420	Mgm101p	Mitochondrial genome maintenance MGM101	1	1	1	1	1	1
PF06831	H2TH	Formamidopyrimidine-DNA glycosylase H2TH domain	1	1	1	1	1	0
PF08221	HTH 9	RNA polymerase III subunit RPC82 helix-turn-helix domain	1	0	0	1	1	1
PF00196	GerE	Bacterial regulatory proteins, luxR family	0	7	0	0	0	0
PF01498	Transposase 5	Transposase	0	4	0	0	0	0
PF02186	TFIIE_beta	TFIIE beta subunit core domain	0	0	0	0	0	1
PF02229	PC4	Transcriptional Coactivator p15 (PC4)	0	1	1	1	1	1
PF02892	zf-BED	BED zinc finger	0	0	1	0	0	1
PF04090	RNA_pol_I_TF	RNA polymerase I specific initiation factor	0	1	0	0	0	1
PF04684	BAF1_ABF1	BAF1 / ABF1 chromatin reorganising factor	0	0	0	0	0	1
PF06839	zf-GRF	GRF zinc finger	0	0	1	0	2	1
PF07453	NUMOD1	NUMOD1 domain	0	0	0	0	0	1
Total PF hits			1018	831	740	364	525	407