SUPPLEMENTAL TABLE S7. Proteins involved in ER stress: UPR and ERAD. Bold characters: higher sequence similarity to mammalian proteins.

A. niger	*S. cerevisiae*	% Identity (E-value)	*H. sapiens*	% Identity (E-value)	Description	NSAF 10^4	
						Sorbitol	Xylose
An08g00830	Ptc2	67 (2e-81)	PPM1A	55 (2e-50)	Ser/Thr phospatase	2.1	2.8
An03g02770	Dcr2	55 (3e-62)	no hits	no hits	Phosphoesterase: UPR downregulation	1.7	1.8
An08g01480	Trl1	55 (9e-145)	no hits	no hits	tRNA ligase required for tRNA splicing	0.2	1.2
An04g01720	**Hlj1**	**52 (1e-26)**	**DNAJB12**	**48 (2e-39)**	**ERAD of membrane substrates**	**7**	**8.4**
An01g04280	Ydj1	69 (2e-120)	DNAJA1	62 (7e-94)	Chaperone for protein translocation	4.1	2.8
An16g08470	**(Yos9)**	**48 (1e-10)**	**OS9**	**40 (9e-17)**	**HRD ligase**	**5.4**	**3.4**
An01g12720	**(Hrd3)**	**43 (3e-39)**	**SEL1L2**	**52 (3e-75)**	**HRD complex subunit**	**3.2**	**2.2**
An04g09170	Cdc48	88 (0.0)	VCP	87 (0.0)	Retrotranslocation of Ub-proteins	1.4	21
An01g02880	Rpl40a	100 (4e-69)	UBA52	93 (6e-63)	Fusion protein, precursor of Ub	7.1	12
An02g07010	**Rps31**	**91 (1e-57)**	**RPS27A**	**86 (7e-63)**	**Fusion protein, precursor of Ub**	**0.8**	**5.3**
An09g05480	Ubp15	50 (4e-174)	USP7	53 (2e-165)	Ub-specific protease	3.5	3.7
An15g06020	Uba1	77 (0.0)	UBA1	72 (0.0)	Ub activating enzyme	3.6	5.1
An04g01730	Ufd2	52 (3e-134)	UBE4B	49 (2e-103)	Ub-Ub ligase	4.5	1.8
An02g06300	**Vps70**	**47 (5e-53)**	**FOLH1**	**50 (1e-85)**	**Proteolysis**	**0.1**	**0.9**
An11g03970	**(Yta12)**	**44 (5e-06)**	**(SPG7)**	**47 (2e-07)**	**Proteolysis**	**5**	**4.1**
An11g11250	**Jem1**	**53 (7e-14)**	**DNAJC3**	**50 (7e-61)**	**Degradation of substrates (putative)**	**5.9**	**5.2**
An14g00180	Rpt6	88 (4e-179)	PSMC5	87 (8e-168)	19S RP proteasome ATPase	2.3	3
An18g06230	Rpt4	85 (3e-170)	PSMC6	88 (1e-169)	19S RP proteasome ATPase	3.6	2.5
An18g05230	Rpt5	88 (0.0)	PSMC3	86 (4e-179)	19S RP proteasome ATPase	2.5	2.1
An07g10110	Rpn8	77 (8e-108)	PSMD7	74 (2e-90)	19S RP proteasome ATPase	4	5.3
An11g09690	**Rpn5**	**66 (1e-109)**	**PSMD12**	**64 (4e-115)**	**19S RP proteasome ATPase**	**8.3**	**5**
An11g10380	**Rpn3**	**57 (4e-85)**	**PSMD3**	**65 (5e-114)**	**19S RP proteasome ATPase**	**3**	**1.3**
An08g10710	Rpn9	56 (1e-64)	PSMD13	56 (3e-60)	19S RP proteasome ATPase	3.8	2.1
An18g05070	**Rpn6**	**69 (8e-102)**	**PSMD11**	**69 (3e-110)**	**19S RP proteasome ATPase**	**11.4**	**7**
An16g02210	Rpn12	52 (7e-32)	PSMD8	53 (5e-28)	19S RP proteasome ATPase	5.1	2.9
An18g03010	**Rpn1**	**64 (3e-146)**	**PSMD2**	**71 (0.0)**	**19S RP proteasome ATPase**	**7.9**	**7.3**
An04g03270	**Rpn2**	**59 (7e-178)**	**PSMD1**	**59 (0.0)**	**19S RP proteasome ATPase**	**1.5**	**2.3**
An02g07040	Scl1	75 (4e-81)	PSMA6	76 (2e-79)	20S CP proteasomal α subunit	1.6	12.2
An07g02010	Pre8	76 (1e-99)	PSMA2	63 (5e-71)	20S CP proteasomal α subunit	3.3	15.2
An11g06720	Pre9	80 (2e-93)	PSMA4	77 (1e-82)	20S CP proteasomal α subunit	0.5	9.6
An02g10790	Pre6	86 (8e-102)	PSMA7	82 (3e-83)	20S CP proteasomal α subunit	0.5	11
An02g03400	Pup2	83 (7e-101)	PSMA5	78 (3e-87)	20S CP proteasomal α subunit	0.5	7.7
An15g00510	**Pre5**	**72 (2e-73)**	**PSMA1**	**67 (3e-77)**	**20S CP proteasomal α subunit**	**0.5**	**14.8**
An18g06800	Pre10	77 (3e-89)	PSMA3	72 (5e-79)	20S CP proteasomal α subunit	3.3	15.5
An13g01210	Pre3	87 (5e-80)	PSMB6	76 (1e-65)	20S CP proteasomal β subunit	4.6	10.4
An11g04620	Pup1	79 (1e-96)	PSMB7	74 (2e-84)	20S CP proteasomal β subunit	0.5	3.6
An04g01800	Pup3	84 (2e-87)	PSMB3	74 (7e-66)	20S CP proteasomal β subunit	3.2	6.6
An04g01870	Pre1	79 (2e-67)	PSMB2	66 (1e-40)	20S CP proteasomal β subunit	0.6	4.9
An11g01760	Pre2	75 (1e-92)	PSMB5	70 (7e-59)	20S CP proteasomal β subunit	1	4.5
An18g06700	Pre7	71 (2e-77)	PSMB1	61 (5e-51)	20S CP proteasomal β subunit	0.5	21.9
An18g06680	Pre4	62 (2e-64)	PSMB4	65 (3e-53)	20S CP proteasomal β subunit	2.5	5.9
An04g05320	Blm10	40 (6e-90)	PSME4	42 (5e-65)	Proteasome regulator	0.5	1.8
An07g01470	**Ddi1**	**55 (2e-56)**	**DDI1**	**68 (5e-60)**	**Ub-dependent protein catabolism**	**4.4**	**0.8**
An17g02180	**Dfm1**	**47 (1e-07)**	**DERL1**	**48 (2e-17)**	**Derlin-like protein**	**3.6**	**6**
An01g12370	(Ubx3)	53 (7e-35)	(FAF2)	52 (4e-28)	Ub activator domain protein	5.2	5.3