Absence of the peroxiredoxin Pmp20 causes peroxisomal protein leakage and necrotic cell death

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Table S1. *Hansenula polymorpha* strains and plasmids used in this study.

Strain	**Relevant properties**	**Reference**
WT, *leu 1.1 ura3*	Wild type NCYC495, *leu 1.1 ura 3*	[47]
WT, *leu 1.1*	Wild type NCYC495, *leu 1.1* URA3	[47]
WT::P_{AMO} *GFP-SKL*	Wild type containing a single copy integration of the *GFP-SKL* gene, behind the P_{AMO} promoter	[20]
pmp20	*PMP20* disruption strain, *leu1.1*	This study
pmp20::P_{AMO}*GFP-SKL*	*pmp20* containing a single copy integration of the *GFP-SKL* gene, behind the P_{AMO} promoter	This study
yca1	*YCA1* disruption strain, *leu1.1*	This study
pmp20yca1	*PMP20 and YCA1* double deletion strain, *leu1.1*	This study
Plasmid	**Relevant properties**	**Reference**
pHIPX5-GFP-SKL	pHIPX5 containing a gene encoding GFP containing the PTS1 tripeptide –SKL at the extreme C-terminus	[20]
pEBA025	pHIPX5 containing a gene encoding 6 histidine residues N terminally fused to Pmp20	This study
pENTR 221_ura3	Entry plasmid containing the URA gene	This study
pEBA017	Entry plasmid containing 5'-flanking *PMP20*	This study
pEBA018	Entry plasmid containing 3'-flanking *PMP20*	This study
pEBA019	Expression plasmid containing the *PMP20* disruption cassette and uracil gene as marker	This study
pEBA031	PBluescript variant containing the disruption cassette for YCA1 and zeocin as marker	This study
pFEM39	pBluescript II KS^+ containing the zeocine selection cassette	[48]

Table S2. Oligonucleotides used in this study.

Primer name	**Sequence (5'-3')**
5'-rev-pmp20	GGGGACTGCTTTTTTGTACAAACTTGGTAAGTTGTTAAGAGAGGCGAC*
5'-fwd-pmp20	GGGGACAACTTTGTATAGAAAAGTTGTGCCCTAAATACCGGTTAC
3'-fwd-pmp20	GGGGACAACTTTGTATAGAAAAGTTGTGCCCTAAATACCGGTTAC
3'-rev-pmp	GGGGACAACTTTGTATAATAAAGTTGCCCTGGAGCGACATGATGCAC
Entr221 -URA F	GGGGACAAGTTTGTACAAAAAAGCAGGCTGAGCTTCAACTGATGTTCAGC
Entr221- URA R	GGGGACCACTTTGTACAAGAAAGCTGGGTCGAAGCACATCAACTGGATCG
cut-fwd-pmp20	ACAGCTTTGCTAGAAGTTTGGACGCC
cut-rev-pmp20	GGAGCGACATGATGCACACAAAAGG
his-pmp20 -fwd	CCAAGGATCCATGCACCACCACCACCATCACGTTGTTAAGAGAGGCGACA AATTCC
his-pmp20 -rev	GGGTTACAGCTTTGCTAGAAGTTTGGAC
Fw-5'-YCA1	CAATCATCCGCGGTAATACCCAGGAAACTCGCACGCCAATTACG*
Rev-5'-YCA1	GGCAGCGCTCTAGAATATCCGTCTTCCTCATCTCCATCCTGGTC
Fw-3'-YCA1	GACTGTCTCGAGCCATTGCCAGCAGGTTGCAGACTCACGTGTATT
Rev-3'-YCA1	CCACTGGTACCGCAACAGCGTGAGATAACTCTGTATAGGGTTCTCC
pcr-yca1-fw	TACCCAGGAAACTCGCACGCCAATTACGG
pcr-yca1-rev	GCAACAGCGTGAGATAACTCTGTATAGGGTTCTCC

* Underlined sequence indicates introduced stop codon.