**Supplementary Information**

**Mitochondrial Bol1 and Bol3 function**

**as assembly factors for specific iron-sulfur proteins**

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**Supplementary File 1A: Yeast Strains Used in This Study**

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| **Strain** | **Genotype** | **Method of Generation** | **Source/Reference** |
| W303-1A | *MATa; ura3-1; ade2-1; trp1-1; his3-11,15; leu2-3,112* |  | (Mortimer and Johnston, 1986) |
| BY4742 | *MAThis31; leu20; met150; ura30* | obtained from Euroscarf | (Brachmann et al., 1998) |
| *bol1*Δ | BY4739*, yal45c:: KanMX4* | obtained from Euroscarf | EUROSCARF |
| *bol2*Δ | BY4742*, ygl220w:: KanMX4* | obtained from Euroscarf | EUROSCARF |
| *bol3*Δ | BY4742*, yal46c:: KanMX4* | obtained from Euroscarf | EUROSCARF |
| *bol12*Δ | *bol1**, ygl220w:: HIS3* | PCR Fragment (pFA6a-HIS3) (Euroscarf) | this work |
| *bol13*Δ | *yal44w,yal46c::LEU2;*  *leu2::HIS3* | PCR Fragment (pUG73) PCR Fragment (pFA6a-HIS3) (Euroscarf) | this work |
| *bol123*Δ | *bol13**, ygl220w:: KanMX4* | obtained from Euroscarf | this work |
| *bol23*Δ | *bol3**, ygl220w:: HIS3* | obtained from Euroscarf | this work |
| *grx5Δ* | W303-1A, *grx5::KanMX4* | PCR fragment (pFA6a-KanMX4) | (Rodriguez-Manzaneque et al., 1999) |
| *lip5*Δ | BY4742*, lip5:: KanMX4* | obtained from Euroscarf | EUROSCARF |
| *nfu1Δ* | BY4742 *nfu1:: KanMX4* | obtained from Euroscarf | EUROSCARF |
| *nfu1*Δ*bol1* | *bol1**, nfu1::natNT2* | PCR fragment (pFA6a–natNT2) (Janke et al., 2004) | this work |
| *nfu1*Δ*bol3* | *bol3**, nfu1::natNT2* | PCR fragment (pFA6a–natNT2) (Janke et al., 2004) | this work |
| *nfu1*Δ*bol13* | *bol13**, nfu1::natNT2* | PCR fragment (pFA6a–natNT2) (Janke et al., 2004) | this work |

Gene disruptions and promoter exchanges were generated by PCR-based gene replacement and verified by PCR as described previously (Gueldener et al., 2002; Mühlenhoff et al., 2002)Yeast cells were transformed by the lithium acetate method (Gietz and Woods, 2002). In some cells, the *TRP1* gene was disrupted by a *natNT2* cassette (Janke et al., 2004) in order utilize plasmids with the *TPR1* marker.

**Supplementary File 1B. Plasmid Constructs Used in This Study**

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| **plasmid** | **ORF** | **backbone** | **Source/Reference** |
| p424-*BOL1-Myc* | *BOL1,* C-terminal Myc | p424-*MET25* (Mumberg et al., 1995) | this work |
| p425-*BOL3-HA* | *BOL3,* C-terminal HA | p425-*TDH3* (Mumberg et al., 1995) | this work |
| p414-*BOL1* | *BOL1* | p414-*MET25* (Mumberg et al., 1995) | this work |
| p414-*BOL2* | *BOL2,* C-terminal HA | p414-*MET25* | this work |
| p414-*BOL3* | *BOL3* | p414-*MET25* | this work |
| p414-*BOL13* | *BOL13,* own promoter replacing *MET25* | p414-*MET25* | this work |
| p414-*SDH2-Myc* | *SDH2;* C-terminal Myc | p414-*MET25* | Gift of D.R.Winge |
| p416-*SDH1* | *SDH1* | p416-*MET25* | Gift of D.R.Winge |
| p426-*HiPIP-Myc* | Pre-F1**(1-40)-[4Fe/4S]-*HIPIP*; (*C. vinosum);* C-terminal Myc | p426-*TDH3* (Mumberg et al., 1995) | (Mühlenhoff et al., 2011) |
| p426-*RLI1-HA* | *RLI1;* C-terminal HA; own promoter replacing *TDH3* promoter | p426-*TDH3* | (Kispal et al., 2005) |
| p*FET3*-*GFP* | *GFP; FET3* promoter replacing *MET25* promoter | p416-*MET25* | (Hausmann et al., 2008) |
| p*FIT3*-*luc2* | *GFP; FIT3* promoter replacing *MET25* promoter | p416-*MET25* | this work |
| p426-*FDX2-HA* | *FDX2* (*Homo sapiens);* C-terminal HA | p426-*TDH3* | (Sheftel et al., 2010) |
| p424-*GRX5* | *GRX5* | p424-*TDH3* | (Uzarska et al., 2013) |
| p424-*SpGRX5-Myc* | *GRX5 (Schizosaccharomyces pombe);* C-terminal Myc | p424-*TDH3* | (Uzarska et al., 2013) |
| p416-*NFU1* | *NFU1* | p416-*MET25* | (Navarro-Sastre et al., 2011) |
| pETDuet-1-*GLRX5* | truncated *Homo sapiens GLRX5* (32-157)*;* N-terminal 6xHis | pETDuet-1 (Novagen) | this work |
| pETDuet-1-*BOLA1* | truncated *Homo sapiens BOLA1* (30-137)*;* N-terminal 6xHis | pETDuet-1 | this work |
| pETDuet-1-*BOLA3* | truncated *Homo sapiens BOLA3* (25-107)*;* N-terminal 6xHis | pETDuet-1 | this work |
| pETDuet-1-*NFU1* | truncated *Homo sapiens NFU1* (57-254)*;* N-terminal 6xHis | pETDuet-1 | this work |

The plasmids were constructed inserting the indicated genes into vector. The amino acid residues of the encoded proteins and the hexa-histidinyl tag (6xHis) are indicated.

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