

Text S2: Distribution of all Puf3p targets (as determined experimentally by Gerber *et al.*) across the A to F phases

Complete list of Puf3p targets, experimentally characterized by Gerber *et al.* (Gerber, Herschlag *et al.* 2004) were downloaded from the PLoS Biology web site (Table S5 - <http://biology.plosjournals.org/perlserv/?request=get-document&doi=10.1371/journal.pbio.0020079>).

From the 220 Puf3p mRNA targets identified by Gerber *et al.*, 170 corresponded to genes included in our set of 626 mitochondrial genes. The percentage of these 170 mRNAs in each EDPM phase is presented **Figure S2.1** (below). As expected, most of the Puf3p targets were found in phase A (more than 80%). Note that such a result fully agrees with our observation that the motif P3E (Foat, Houshmandi *et al.* 2005) is significantly overrepresented in the 3' UTR of mRNA highly expressed during phase A (the enrichment p-value = 6×10^{-120}) (**Figure 5B**).

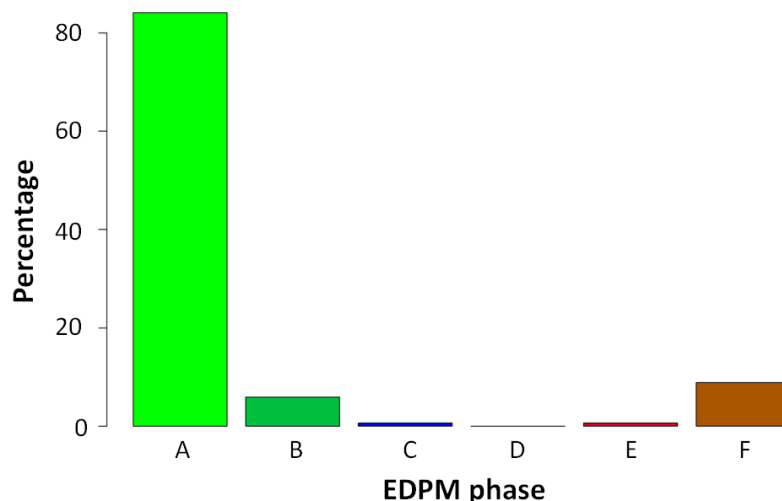


Figure S2.1: Distribution of Puf3p target genes across the A to F phases. From the 220 genes experimentally characterized by Gerber *et al.* (Gerber, Herschlag *et al.* 2004) as being Puf3p target genes, 170 were analyzed in this study because (i) they were identified as involved in mitochondrial biogenesis, as defined by (Saint-Georges, Garcia *et al.* 2008) and (ii) they displayed significant periodic patterns during YMC, as defined by (Tu, Kudlicki *et al.* 2005). The percentage of these 170 genes, found in each EDPM temporal phases A to F is presented here. As expected, most of the Puf3p mRNA targets are found in phase A.

Reference

Gerber, A. P., D. Herschlag, *et al.* (2004). "Extensive association of functionally and cytologically related mRNAs with Puf family RNA-binding proteins in yeast." *PLoS Biol* 2(3): E79.