**Description of Additional Supplementary Files** 

File name: Supplementary Data 1

Description: RNA sequencing data from Sieber and Spradling 2015 examining gene expression

of UPS components in stage 8 egg chambers and stage 10 oocytes that are beginning to enter

quiescence. Stage 10 was chosen to capture the transcriptional profile at the first point where

MRQ begins and oocyte transcription is suppressed. Significance was determined FDR adjusted

Pvalue to account for multiple sampling. All genes in this table display a FDR of less than .05.

File name: Supplementary Data 2

Description: A list of mitochondrial proteins that associate with GSK3 in mitochondrial fractions

based on proximity labeling. The list displayed represents the list of proteins that show greater

than 2-fold increase in the GSK3-APEX/CD8-APEX ratio in 2 independent experiments.

File name: Supplementary Data 3

Description: A list of ubiquitin proteasome system proteins that associate with GSK3 in

mitochondrial fractions based on proximity labeling. The list displayed represents the list of proteins

that show greater than 2-fold increase in the GSK3-APEX/CD8-APEX ratio in 2 independent

experiments.

File name: Supplementary Data 4

Description: A list of mitochondrial downregulated in mitochondria isolated from quiescent 3T3

cells as assayed by mitochondrial proteomics. n=3 completely independent experiments.

Significance was determined by FDR-adjusted Pvalue.

File name: Supplementary Data 5

**Description:** A list of oligos and cDNAs used in this study.