# Analysis of Mitochondrial OXPHOS protein Levels in the Quadriceps from Gestationally Treated MCP230 Mice on a High Fat Diet

Erin Stephenson

2016-01-21

## **Details**

Protein lysates were prepared using standard protocols and quantified via Bradford assay. Equal protein was loaded into 2x 12 well gradient gels. Proteins were separated by SDS-PAGE and transferred to Nitrocellulose membranes. Membranes were blotted using the mitochondrial OXPHOS antibody cocktail from ABCAM. Protein content was determined from fluorescent images obtained on a LiCor Odyssey and quantified using Image Studio Lite software. Protein expression was normalized to total AMPK expression -which was not different between groups- and is presented here relative to the saline control group

# Data analysis

The data is saved in C:/Users/esteph16/Documents/GitHub/ObesityParticulateTreatment/scripts/MitoProteinAnaly The raw data file for the first run is named PostReviewMitoWesterns.xlsx.

## **Statistics**

## **Figures**

## Session Information

- R version 3.1.1 (2014-07-10), x86\_64-w64-mingw32
- Locale: LC\_COLLATE=English\_United States.1252, LC\_CTYPE=English\_United States.1252, LC\_MONETARY=English\_United States.1252, LC\_NUMERIC=C, LC\_TIME=English\_United States.1252
- Base packages: base, datasets, graphics, grDevices, methods, stats, utils
- $\bullet$  Other packages: car 2.0-25, plyr 1.8.3, r Java 0.9-8, xlsx 0.5.7, xlsx<br/>jars 0.6.1
- Loaded via a namespace (and not attached): grid 3.1.1, lattice 0.20-29, lme4 1.1-10, MASS 7.3-33, Matrix 1.2-4, MatrixModels 0.4-1, mgcv 1.8-0, minqa 1.2.4, nlme 3.1-117, nloptr 1.0.4, nnet 7.3-8, parallel 3.1.1, pbkrtest 0.4-4, quantreg 5.21, Rcpp 0.12.3, SparseM 1.7, splines 3.1.1, tools 3.1.1

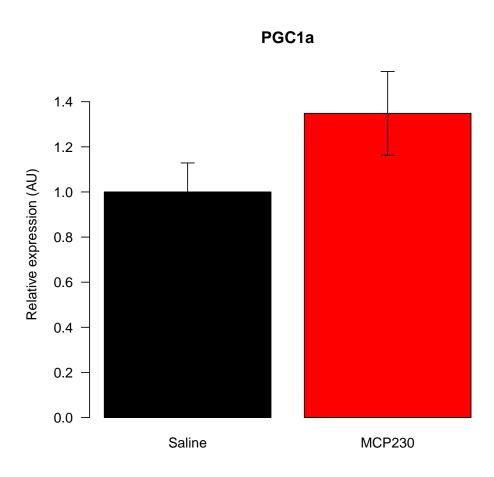


Figure 1: Barplot of Relative PGC1a Protein Expression in Quadriceps Muscle, Saline versus MPI

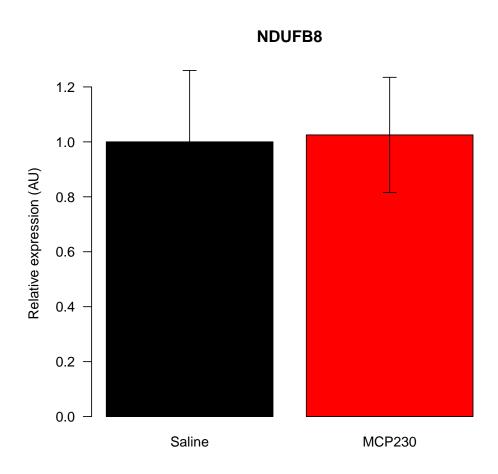


Figure 2: Barplot of Relative NDUFB8 Protein Expression in Quadriceps Muscle, Saline versus MPI

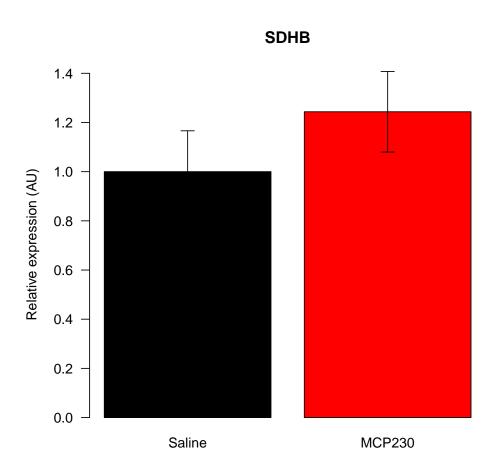


Figure 3: Barplot of Relative SDHB Protein Expression in Quadriceps Muscle, Saline versus MPI

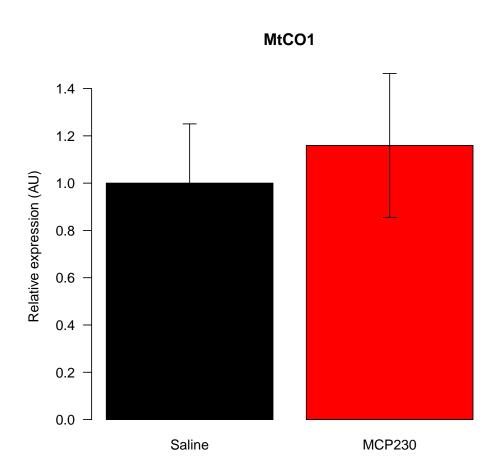
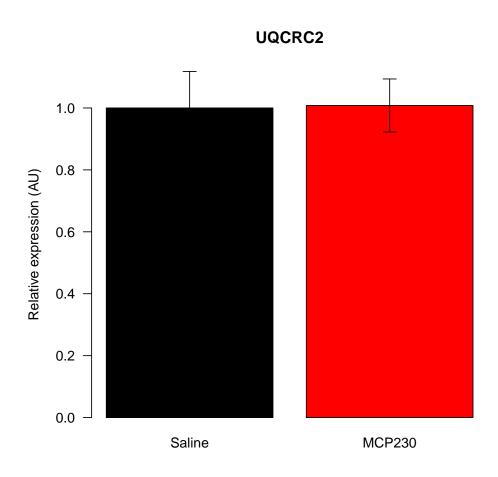


Figure 4: Barplot of Relative MtCo1 Protein Expression in Quadriceps Muscle, Saline versus MPI



 $Figure \ 5: \ Barplot \ of \ Relative \ UQCRC2 \ Protein \ Expression \ in \ Quadriceps \ Muscle, \ Saline \ versus \ MPI$ 

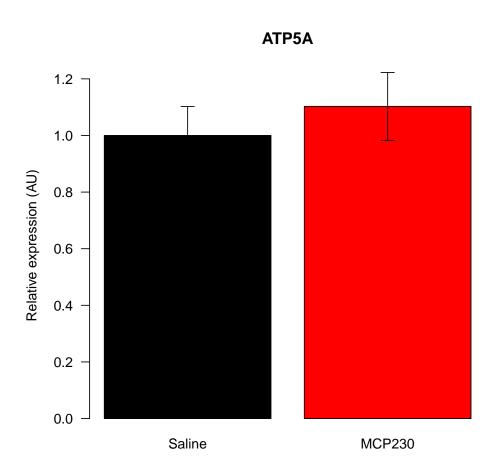


Figure 6: Barplot of Relative ATP5A Protein Expression in Quadriceps Muscle, Saline versus MPI

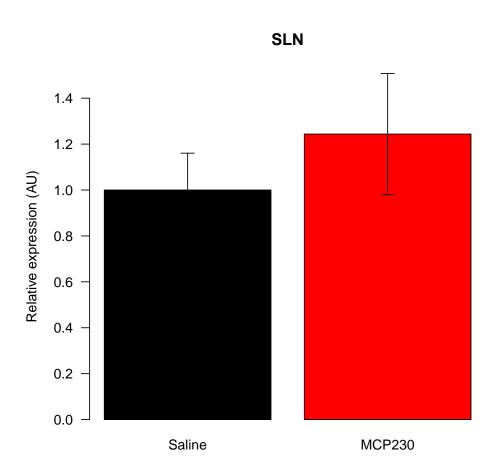


Figure 7: Barplot of Relative SLN Protein Expression in Quadriceps Muscle, Saline versus MPI

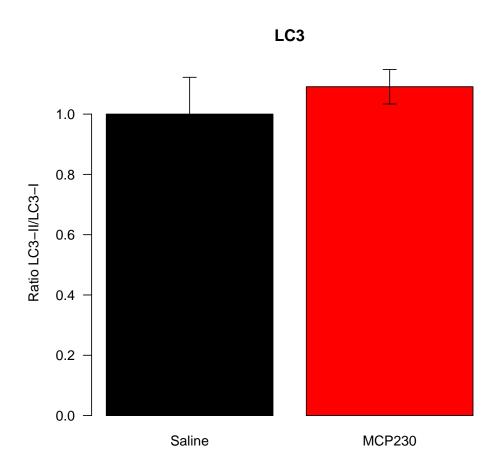


Figure 8: Barplot of LC3 Protein Expression in Quadriceps Muscle, Saline versus MCP230

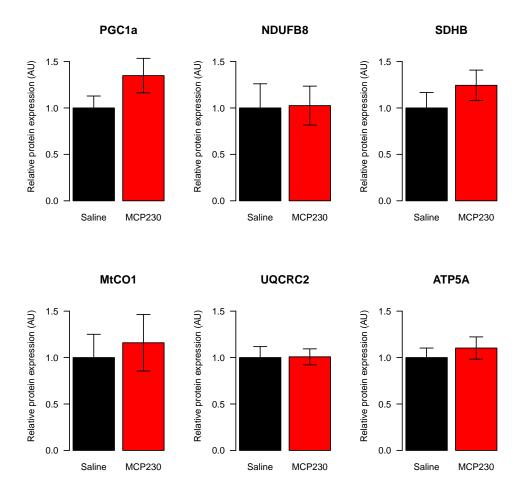


Figure 9: Barplot of the OXPHOS proteins