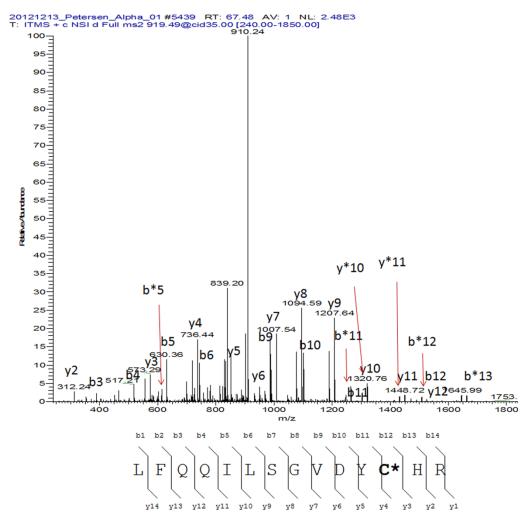
#### **Supplemental Data**

#### Figure legends:

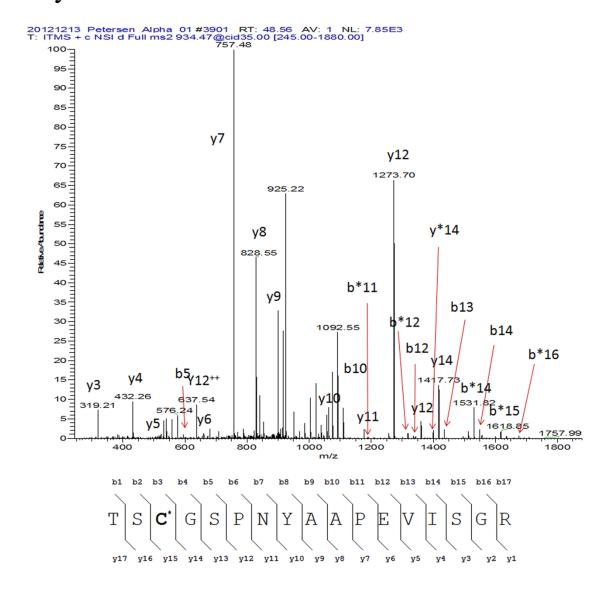
Supplemental Table 1. Peptides identified from tryptic digests of 4-HNE treated rAMPK $\alpha$ . 10 micrograms of rAMPK $\alpha$  was treated with 4-HNE (molar ratio 5:1), trypsin digested and analyzed using LC/MS as described in Methods. Peptides containing a 4-HNE adducts are in bold with \* denoting specific residues modified.

Supplemental Figure 1. Identification of 4-HNE modified rAMPKα/β at residue Cys<sup>130</sup>, Cys<sup>174</sup>, Cys<sup>227</sup> and Cys<sup>304</sup>, Cys<sup>225</sup> using LC/MS/MS analysis. (A) 4-HNE modified peptide containing Cys<sup>130</sup> (+158), MS/MS analysis was performed and the resulting b/y ion fragmentation confirmed peptide identity (LFQQILSGVDYC\*HR). (B) 4-HNE modified peptide containing Cys<sup>174</sup> (+158), MS/MS analysis was performed and the resulting b/y ion fragmentation confirmed peptide identity (TSC\*GSPNYAAPEVISGR). (C) 4-HNE modified peptide containing Cys<sup>227</sup> (+158), MS/MS analysis was performed and the resulting b/y ion fragmentation confirmed peptide identity (IC\*DGIFYTPQYLNPSVISLLK). (D) 4-HNE modified peptide containing Cys<sup>304</sup> (+158), MS/MS analysis was performed and the resulting b/y ion fragmentation confirmed peptide identity (FEC\*SEEEVLSCLYNR). (E) 4-HNE modified peptide containing Cys<sup>225</sup> (+158), MS/MS analysis was performed and the resulting b/y ion fragmentation confirmed peptide identity (DTGISC\*DPALLPEPNHVMLNHLYALSIK).

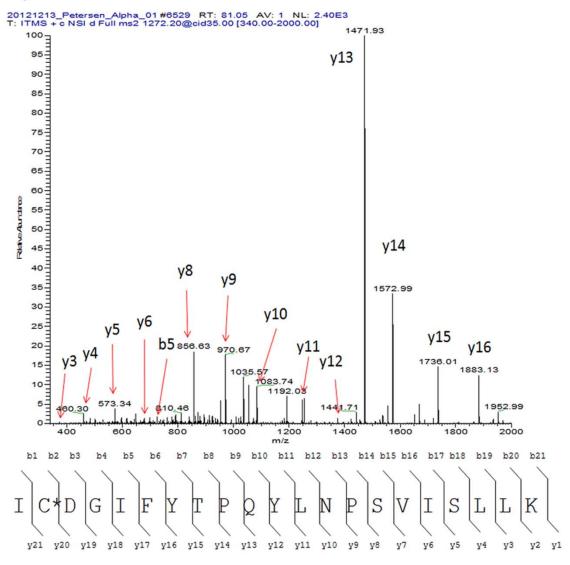
# Supplementary Figure 1A Cys130



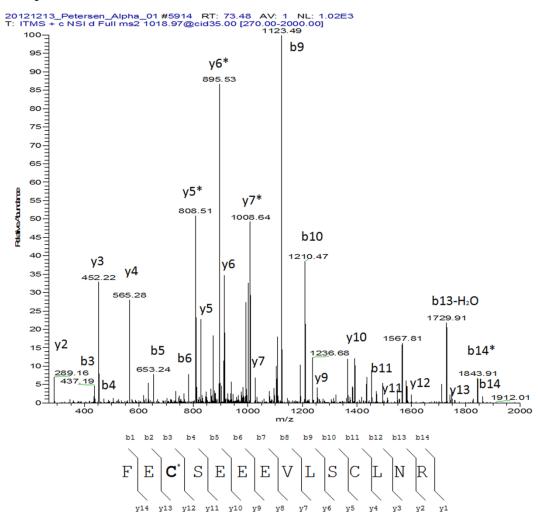
# Supplementary Figure 1B Cys174



# Supplemental Figure 1c Cys227



# Supplementary Figure 1d Cys304



#### Supplemental Figure 1E. Cys 225 AMPKβ

