Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Dataset of the phosphoproteomics data. All identifications from four

biological repeats listed in the sheet, including fold changes and p values (Student's t-

test). The peptides with two or more phosphorylation sites were treated as two or more

different phosphopeptides.

File Name: Supplementary Data 2

Description: Differential phosphosites lists. The data were filtered from Table S1 by

selecting those peptides whose fold-change in phosphorylation between wild-type (WT)

cells and AMPK 1/2-DKO cells was greater than 1.5 and p value lower than 0.01 (t-

test).

Sheet 1. 109 phosphosites with higher phosphorylation levels in WT cells than in

AMPK α 1/ α 2-DKO cells.

Sheet 2. 51 phosphosites with higher phosphorylation levels in AMPK α 1/ α 2-DKO cells

than in WT cells.

File Name: Supplementary Data 3

Description: Functional analysis for Fig. 2c. The functional annotation details for Fig. 2c.

This table includes all the proteins listed in the three groups.

File Name: Supplementary Data 4

Description: Novel AMPK substrate phosphosites. The 24 novel AMPK substrate phosphosites identified by this analysis.