Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Summary of quantified phosphorylation sites of rat liver samples treated with vehicle (VEH) or glucagon (GCG) for 2, 8 and 32min, along with key details such as log2 fold changes for each pairwise comparison, as well as corresponding p-values and adjusted p-values.

File name: Supplementary Data 2

Description: Kinase enrichment was performed based on the list of differentially phosphorylated sites of rat liver samples treated with vehicle (VEH) or glucagon (GCG) for 2, 8 and 32min. Sheet 1: Summary of predicated kinase activation by glucagon for 2mins. Sheet 2: Summary of predicated kinase activation by glucagon for 8mins. Sheet 3: Summary of predicated kinase activation by glucagon for 32mins.

File name: Supplementary Data 3

Description: Summary of quantified phosphorylation sites of human hepatoma SNU398-GCGR cells treated with either vehicle (VEH) or glucagon (GCG) (1 nM) for 30min, along with key details such as log2 fold changes, as well as corresponding p-values and adjusted p-values.

File name: Supplementary Data 4

Description: Co-immunoprecipitation proteomics analysis of the mice liver treated with vehicle or glucagon reveals SEC22B and S137 phosphorylation interactome. Sheet 1: Summary of as protein enrichment with log2 fold changes, as well as corresponding log10 p-values and adjusted p-values. Sheet 2: VENN diagram summarizes the amount of proteins interacting with SEC22B under the different conditions (enriched proteins: Log2>4, FDR<0.05).

File name: Supplementary Data 5

Description: Full name of abbreviations for serum amino acids and acylcarnitines.

File name: Supplementary Data 6

Description: Summary of actual p-values for multiple comparisons in Figure 3 and Figure 4.