Description of Additional Supplementary Items

File name: Supplementary Table 1 **Description:** Sequences of qPCR primers

File name: Supplementary Data 1 **Description:** All the source data of blot figures presented in the main and supplementary figures

File name: Supplementary Data 2 **Description:** Measured metabolites from 2D/3D cell lysates

File name: Supplementary Data 3 **Description:** Measured excreted metabolites from 2D/3D cell lysates

File name: Supplementary Data 4 **Description:** Measured metabolites from 2D/3D/kidney/nephron lysates

File name: Supplementary Data 5 **Description:** Measured lipids from 2D/3D/kidney/nephron lysates

File name: Supplementary Data 6 **Description:** Statistics on metabolites from 2D/3D cell lysates

File name: Supplementary Data 7 **Description:** Statistics on excreted metabolites from 2D/3D cell lysates

File name: Supplementary Data 8 **Description:** Statistics on metabolites from 2D/3D/kidney/nephron lysates

File name: Supplementary Data 9 **Description:** Statistics on lipids from 2D/3D/kidney/nephron lysates