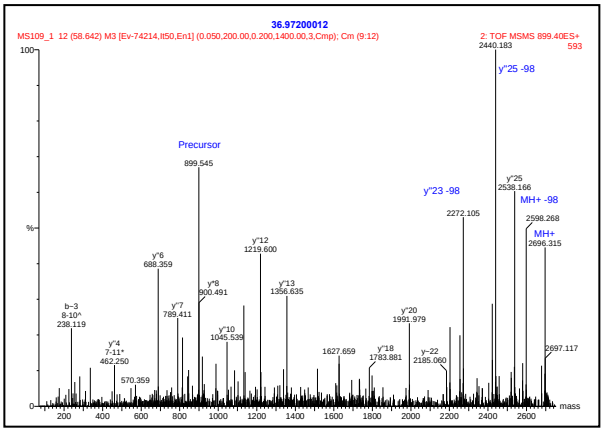
Supplementary data

Supplementary figure 1. MS/MS spectra of phosphopeptides of FOXK2. (A) Fragment ions resulting from the triply charged precursor ion of the phosphorylated peptides S^{364}APASPNHAGVLSAHSSGAQTPESLSR^{390} with m/z 899.41. The masses range from y4 to y22 ions correspond to the non-phosphorylated sequence part 369–390, whereas loss of 98 Da (H_3PO_4) from y23 and y25 indicates phosphorylation at position Ser368. (B, C) Fragment ions (B, mass range 100-1300 Da and C, 1400-1820 Da) resulting from the triply charged precursor ion of the phosphorylated peptide F^{416}AQSAPGSPLSSQPVLITVQR^{436} with m/z 755.05. The evidence for the phosphorylation of Ser423 comes from the mass of the N-terminal b5 and C-terminal y4-y13 ions corresponding to the non-phosphorylated sequence and the neutral loss of phosphoric acid (98 Da) from y14 and y16 ions.

Supplementary movie 1. FOXK2 localisation in the cell cycle. The movies show time lapse images of live, logarithmically growing Hela cells inducibly expressing EGFP-FOXK2 over a 24 hour period (see Fig. 2B for example cells at different stages of the cell cycle). (A) Fluorescent imaging of GFP-FOXK2 and (B) brightfield images of the same cells. Note the GFP expressing cell on the far right which divides first.

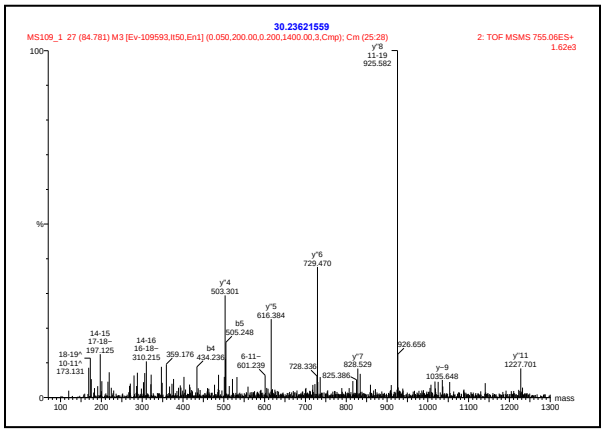
A

S368 phosphorylation



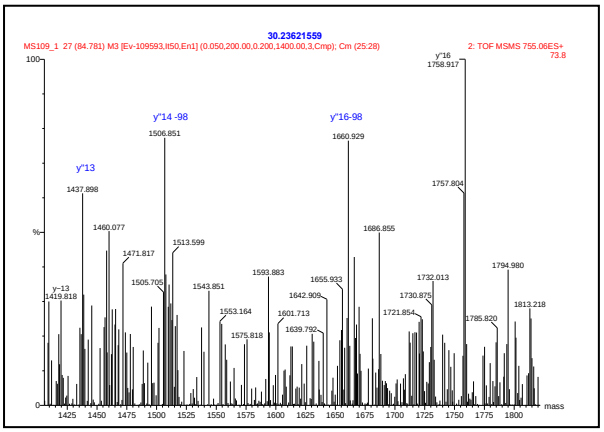
^{364}SAPA[S]PNHAGVLSAHSAHSSGAQTPESLR^{390}

B



C

S423 phosphorylation



^{416}FAQSAPG[S]PLSSQPVLITVQR^{436}

Supplementary Fig. 1