



Supplementary Information, Figure S2. Analysis of the subcellular localization of Plk3.

(A) HeLa cells were treated with CD95L and CHX for the indicated time periods. Cytoplasmic, membrane and nuclear/cytoskeletal proteins were extracted using the Compartmental protein extraction kit. The whole cell lysate (L), cytoplasmic (C), membrane (M) and nuclear/cytoskeletal fractions (N + CS) were immunoblotted against Plk3. Different markers for cellular compartments were used: antibodies for GAPDH (cytoplasm), Lamin B1 (nucleus), Nucleolin (nucleolus), Pan-Cadherin (plasma membrane), Calnexin (ER membrane) and Vimentin (cytoskeleton). (B) Jurkat (left panel) or HeLa (right panel) cells were transfected with Flag-tagged full-length Plk3. Cytoplasmic and membrane proteins were extracted, separated and subsequently immunoblotted against Flag, GAPDH, Calnexin and Pan-Cadherin. (C) HeLa (left panel) and Jurkat (right panel) cells were treated without or with 500 nM Doxorubicin (Dox) for 0 and 2 h to induce DNA damage. Cell lysates were incubated with or without 1000 U λ -phosphatase for 30 min at 30 °C, and immunoblotted for Plk3 and the DNA damage-specific marker pT68 Chk2. (D) Schematic representation of Flag-tagged full-length Plk3 (Flag-Plk3-WT) and truncated forms of Plk3 (NT1, NT2, NT3, NT4, CT1 and CT2) which were used for transfection of HEK 293T cells (E). (E) HEK 293T cells were transfected with Flag-Plk3-WT and its truncated forms for 24 h. WB analysis of cell lysates using α -Flag (Sigma-Aldrich), α -Plk3 (BD; aa. 334-607) and α -Plk3 (Abcam; aa. 1-100) antibodies was performed in order to determine the specificity and the binding site of antibody.