

Supplementary Figure 1. Intracellular heat shock protein levels and sensitivity to nutlin-3 in primary AML cells with wild type TP53. (A) Sensitivity to nutlin-3 ( $10 \mu M$ , 24 hours) in 31 primary AML samples with wild type TP53 was determined by  $^3$ H-thymidine incorporation assay, and samples were analyzed in triplicates. Intracellular levels of heat shock proteins Hsp27 (phospho-Ser82), Hsp27 (phospho-Ser15), Hsp40, Hsp60, Hsp70 and Hsp90 $\alpha$  for all samples were determined using Hsp/Chaperone 8-plex MultiBead kit and flow cytrometric analysis. Samples were analyzed in duplicates. (B) Median values of heat shock protein levels were determined for patient samples that were sensitive ( $10 \mu M$ ) most sensitive ranging from 18-59% viability of control) and non-sensitive ( $10 \mu M$ ) least sensitive ranging from 83-above 100% viability of control) to nutlin-3, and are shown in the figure together with values for individual patient samples. Mean values are given below. For Hsp27 (phospho-Ser82) and Hsp27 (phospho-Ser15) levels are given as  $\mu M$ 1; for Hsp40, Hsp60, Hsp70 and Hsp90 $\mu M$ 2 levels are given as  $\mu M$ 3.