

Figure S1, MDM4 inhibits S6K phosphorylation.
a Wb analysis of the indicated proteins in MCF10A cells interfered for MDM4 by inducible shRNA vector (by doxycycline-DOX) and/or transiently overexpressing MDM4. b Wb analysis of the indicated proteins in HeLa cells transfected with siCTL and siMDM4 and treated or not with RAPA. c Wb analysis of the indicated proteins in Hela cells transiently transfected as indicated and treated or not with RAPA (40nM). d Wb analysis of the indicated proteins in Hela cells transiently transfected as indicated and treated with EBSS for 50 minutes and then with aa for 30 minutes. e Wb analysis of the indicated proteins in Hela cells transfected with siMDM4 or siCTL and after 24 hrs treated with Torin2 (Tor2, 50nm) for additional 24 hrs . f Wb analysis of the indicated proteins in $\mathrm{p} 53^{-/-\mathrm{MEFs}}, \mathrm{p} 53^{-/-} \mathrm{Mdm}^{-/-} \mathrm{MEFs}, \mathrm{p} 53^{-/-} \mathrm{Mdm}^{-/-\mathrm{MEFs}}$ untreated (NT) or treated with EBSS for 50 ' and then with complete medium for additional 30' and 60'. Histograms show the ratio of densitometric values of phosphorylated S6K1 (pS6K1) to S6K1. pS6K1/S6K1 ratio from CTL lane was arbitrarily set to 1 . In (f) the value in untreated cells (NT) of each cell line was arbitrarily set to 1 . The graphs show the mean $\pm$ SD of three independent experiments.



Figure S2, MDM4 depletion leads to mTORC1 relocalization.
Wb analysis of the indicated proteins in 293T cells interfered for MDM4 by inducible shRNA vector (by doxycycline-DOX). Left panel shows total whole cell extract (WCE), right panels show light membrane/cytosolic (lm/cyt) and heavy membrane (hm) fractions. Histogram shows the \% of mTOR signal in the $\mathrm{Im} / \mathrm{cy}$ and hm fractions corrected for the respective loading control. mTOR signals in the $\mathrm{Im}+\mathrm{hm}$ fractions was arbitrarily set to 100\%.


Figure S3, MDM4 affects cell size.
a FSC-H of Hela cells treated as indicated. Mean $\pm$ SD of two independent biological replicates performed in duplicates is shown. $\mathbf{b} \mathrm{Wb}$ analysis of the indicated proteins in 293T cells transfected with siCTL or siMDM4 and after 24hrs treated with RAPA or transfected with siS6K1 for additional 24hrs.

