Gonzalvez et al., http://www.jcb.org/cgi/content/full/jcb.200803129/DC1

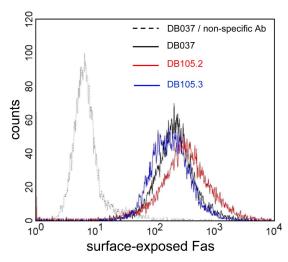


Figure S1. Control (DB037) and Barth syndrome-derived (DB105.2 and DB105.3) lymphoblastoid cells were analyzed by FACS, using an anti-Fas antibody, for the levels of surface-exposed Fas receptor.

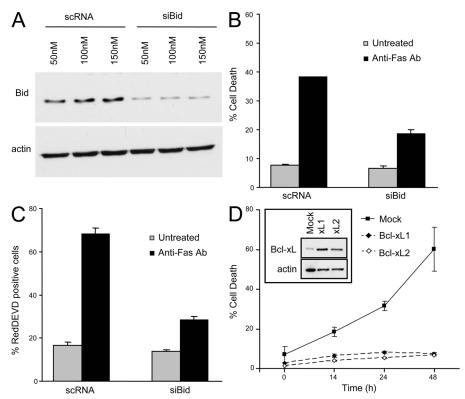


Figure S2. **HeLa cells display a type II response to Fas-induced apoptosis.** (A) Cells were transfected with the indicated amounts of siRNA. Control (scRNA) or Bid-targeting siRNA (siBid) were transfected for 48 h, and Bid protein levels were analyzed by Western blotting. Actin was used as loading control. (B) Cells were transfected with 50 nM of the indicated siRNA and either left untreated or treated with anti-Fas antibody, then, 24 h later, analyzed for cell death. (C) Cells were transfected and treated as in B (but only for 8 h with anti-Fas antibody), and DEVDase (caspase-3-like) activity was analyzed. (D) Cells were either mock-transfected or transfected with a Bcl-xL-expressing vector. Clones were isolated and analyzed for Bcl-xL protein expression levels (inset) and for cell death after anti-Fas antibody treatment. Error bars represent ± SD.

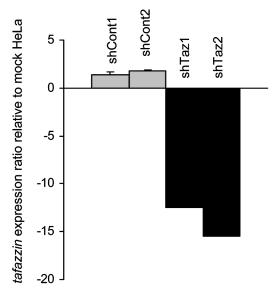


Figure S3. The indicated shRNA-transfected cell clones were analyzed by quantitative PCR for the levels of endogenous *tafazzin* RNA. Error bars represent ± SD.

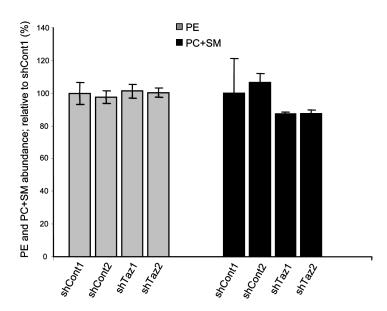


Figure S4. Lipid extracts from control and tafazzin knockdown HeLa cells were analyzed for the overall levels of PE and PC together with sphingomyelin (PC + SM). Error bars represent ± SD.

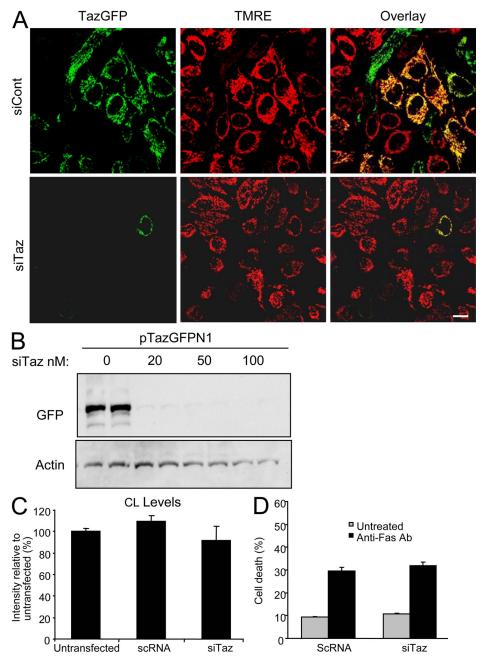


Figure S5. **Transient knockdown of tafazzin does not alter CL levels and has no effect on Fas-induced apoptosis.** (A) HeLa cells were transfected with pEGFP/Taz and either control, nonspecific siRNA (siCont) or tafazzin-targeting siRNA (siTaz). Cells were analyzed by confocal microscopy for the levels and localization of the Taz-GFP fusion protein. Mitochondria were visualized with tetramethyl rhodamine ethyl ester (TMRE). Bar, 10 µm. (B) Cells were treated as in A, and the tafazzin-GFP fusion protein levels were detected by a Western blot using anti-GFP antibody. (C) Cells were transfected with the indicated siRNA (but without tafazzin-GFP), and CL analysis was performed. The total amount of all the CL species as compared with untransfected cells is presented. (D) Cells were transfected with the indicated siRNA and, 48 h later, treated with anti-Fas antibody for 24 h. Cell death was analyzed by Pl exclusion. Error bars represent ± SD.