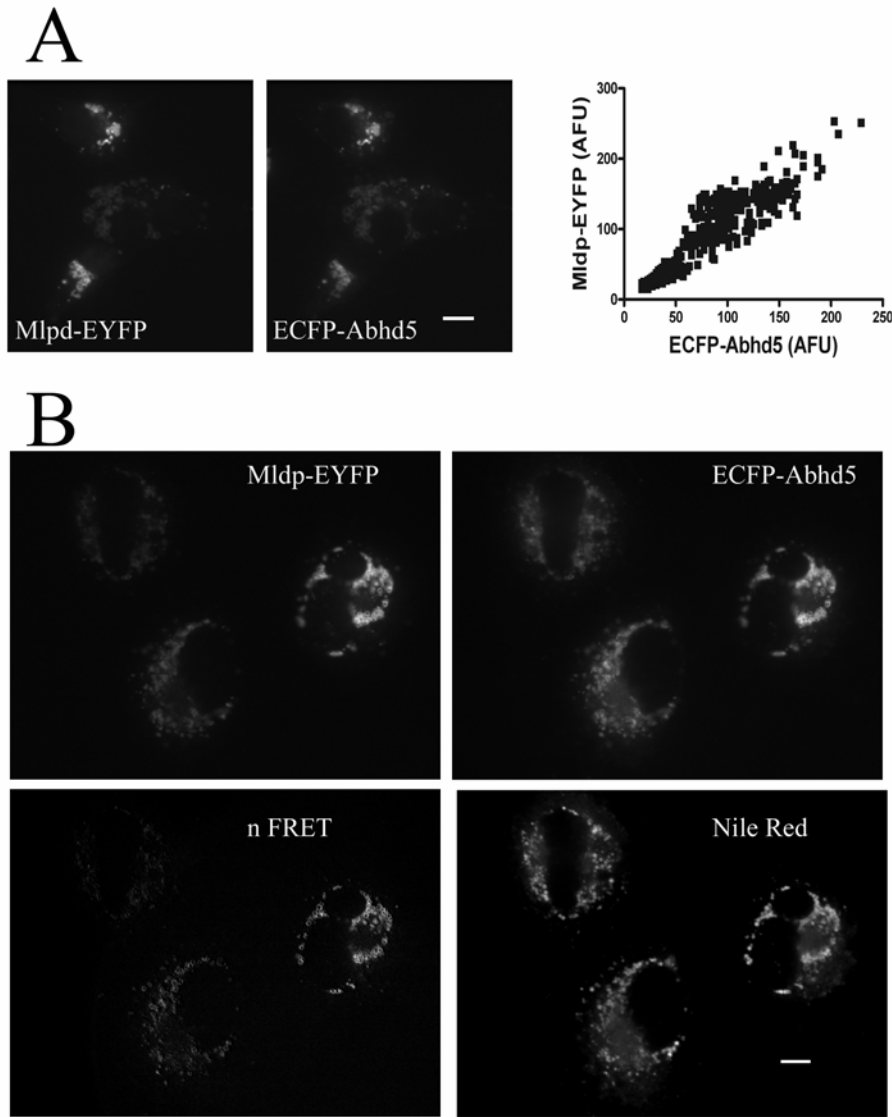


Supplementary figures.

S1



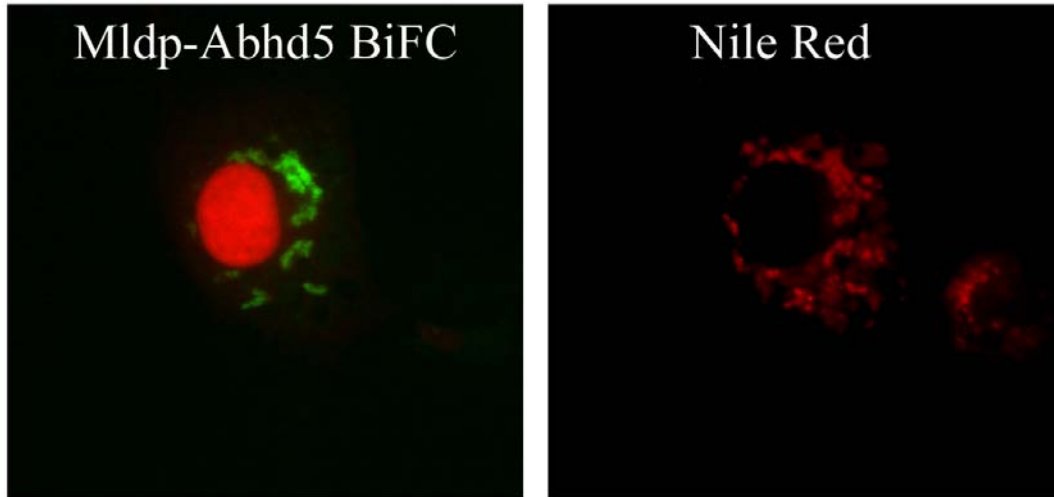


Figure S2. Bimolecular fluorescence complementation between Abhd5 and Mldp. Cells were transfected with Yn-Abhd5 and Mldp-Yc, along with ECFP tracer (red) to identify transfected cells. Confocal image shows complementation of EYFP fluorescence (green) in a transfected cell. Greater than 95% of ECFP positive cells exhibited EYFP fluorescence of the kind shown here. Counterstaining with Nile Red indicated that BiFC was present only on the lipid droplet surfaces.

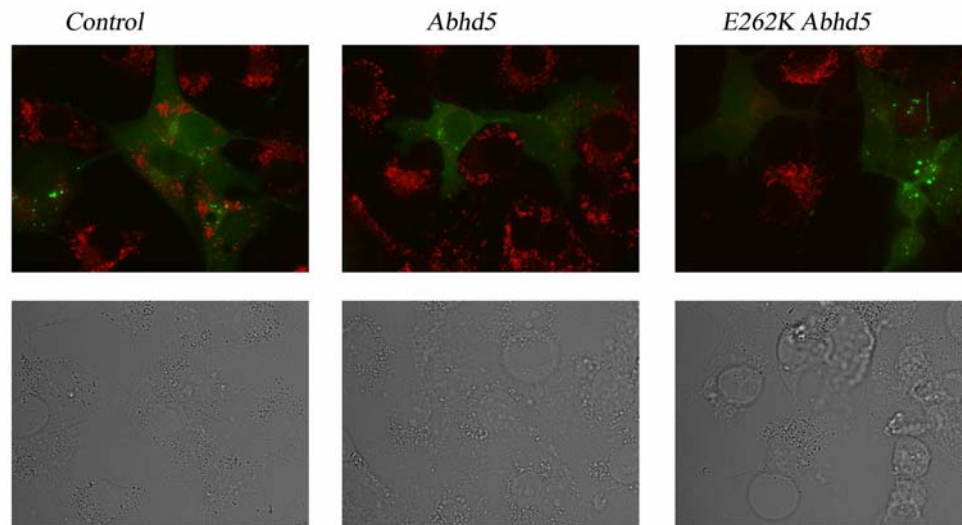


Figure S3. COS-7 cells were transfected ECFP-Atgl and control EYFP vector, wild type Abhd5-EYFP or E262K Abhd5-EYFP. Cells were treated with oleic acid overnight, fixed and stained with Lipitox Deep Red. Green fluorescence is EYFP and red fluorescence is Lipidtox Deep Red. Cells transfected with Abhd5 and Atgl did not accumulate lipid, whereas those transfected with Atgl alone did.