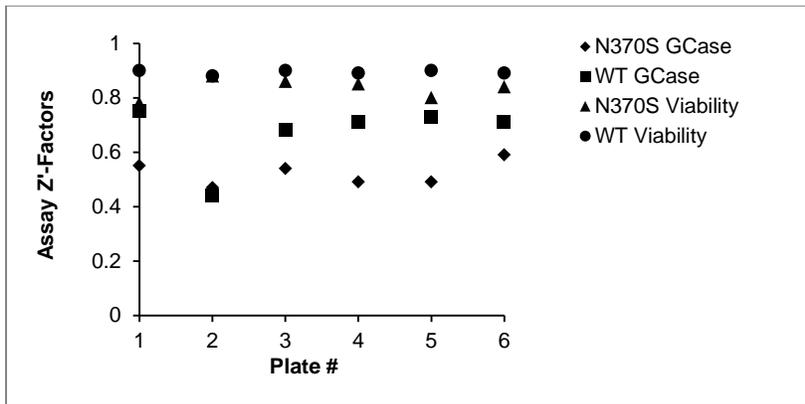
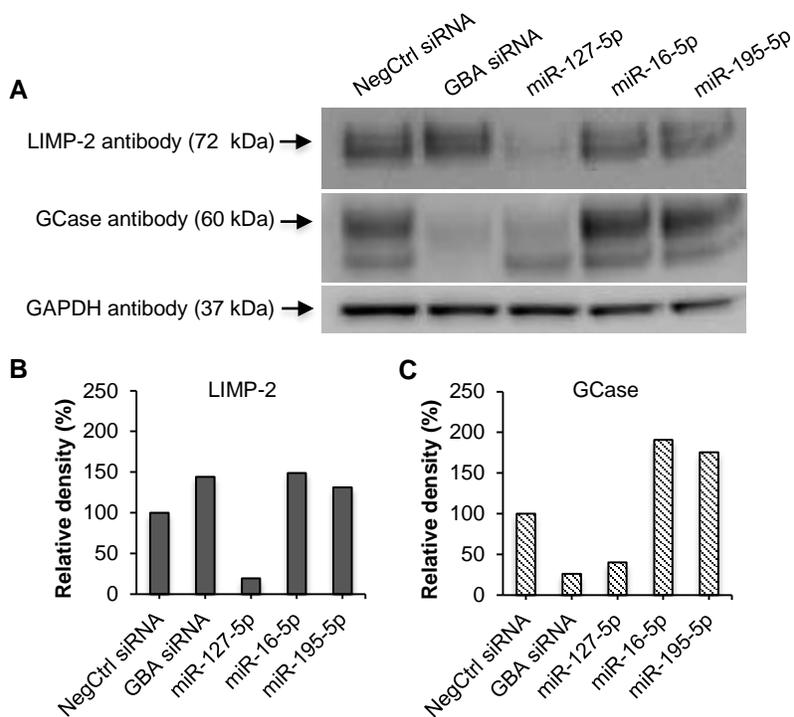


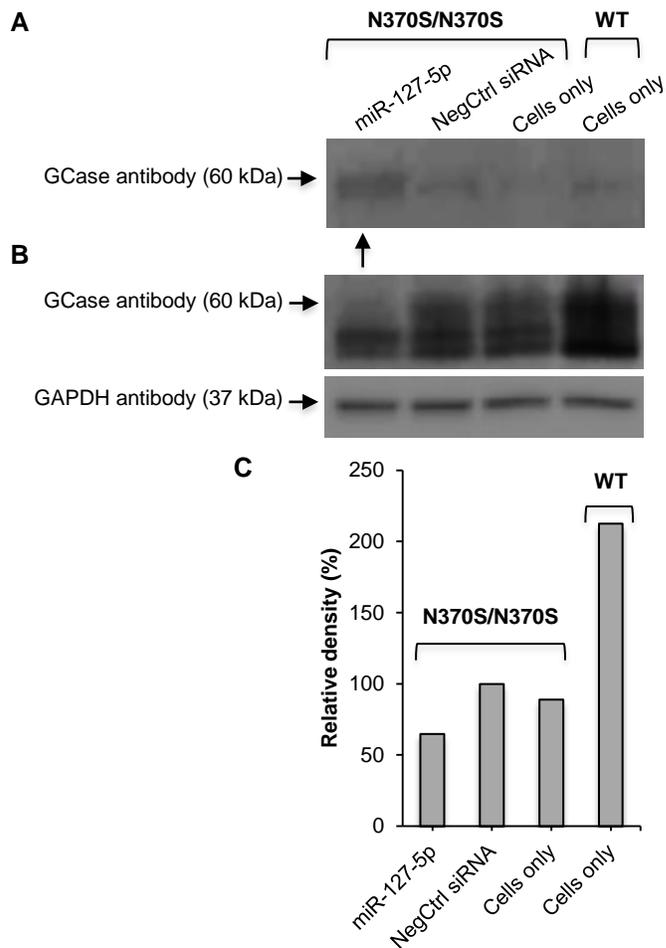
SUPPLEMENTARY DATA



Supplementary Figure S1. Performance of control siRNAs used during the primary miRNA screen using both WT and N370S/N370S Gaucher fibroblasts.



Supplementary Figure S2. Confirmation of the effect of miR-127-5p, miR-16-5p, and miR-195-5p on GCCase and LIMP-2 proteins in N370S/N370S Gaucher fibroblasts. (A) GCCase levels were down-regulated after treatment with GBA siRNA and miR-127-5p. Both miR-16-5p and miR-195-5p induced an increase in GCCase, while miR-127-5p caused a reduction of LIMP-2 levels. Graphs indicate the relative density (%) of each band normalized to the corresponding GAPDH band.



Supplementary Figure S3. GCCase secretion is observed after miR-127-5p treatment in a second N370S/N370S fibroblast line. (A) Evaluation of conditioned media shows up-regulation of GCCase (indicated by the arrow) after transfection with miR-127-5p in comparison to conditioned media derived from cells treated with NegCtrl siRNA, N370S/N370S or WT without siRNA/miRNA. (B) Corresponding cell lysates from the conditioned media experiment show down-regulation of GCCase in N370S/N370S fibroblasts transfected with miR-127-5p. (C) Intensity of each band in (B) is measured and normalized to the corresponding GAPDH band. The NegCtrl siRNA was considered 100% in the relative density calculation.