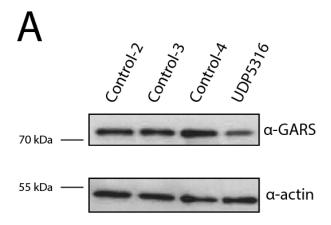
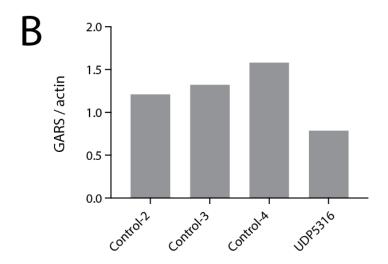


Supplementary Figure S1. Skull X-ray on patient UDP5316. Lateral (**A**) and frontal (**B**) views show cephalofacial disproportion and large calvaria.





Supplementary Figure S2. Additional control fibroblasts to study GARS protein level. (A) Western blot analyses were performed with total protein lysates from fibroblast cell lines from three unaffected individuals (Control-1, Control-2, and Control-3) and the affected patient (UDP5316) using an anti-GARS or anti-actin antibody, as indicated. Sample names are across the top and sizes (kDa) are indicated at the left. (B) ImageJ was performed to quantitate band intensities from panel A, which are expressed as intensity of the GARS-associated band over the intensity of the actin-associated band. Sample IDs are as in panel A and are indicated across the bottom.