

Fig. S1

**Fig. S1. mRNA levels in LCLs of sALS and mutated patients.**

SOD1 mRNA increased significantly in SOD1 mutated patients (A), while no differences were reported for TARDBP and FUS mutations (B, C).

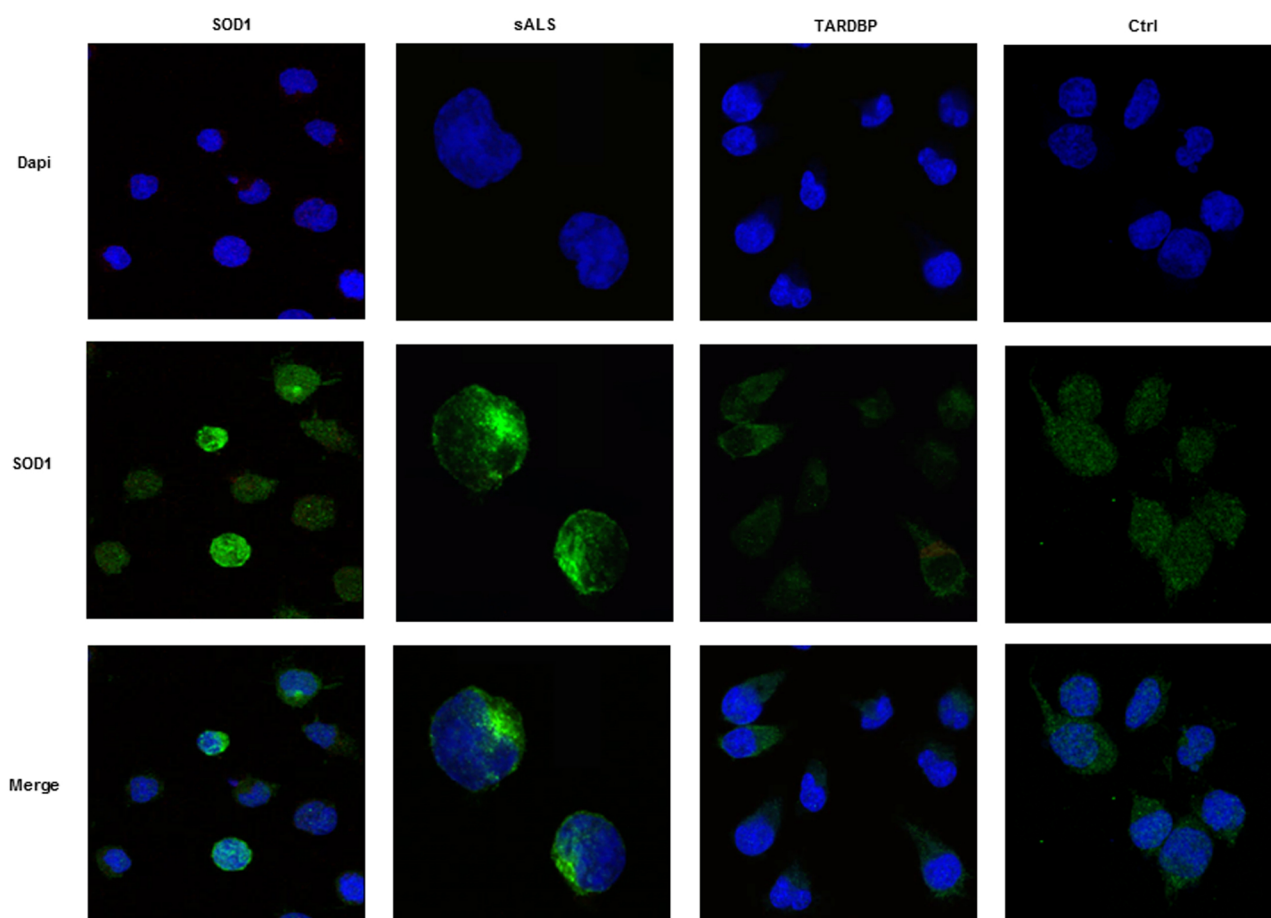


Fig. S2

**Fig. S2. SOD1, TARDBP and FUS mutations showed protein re-localization and aggregation in LCLs.**

Additional representative immunostaining of SOD1 in LCLs of sALS, SOD1, TARDBP and FUS mutated patients.

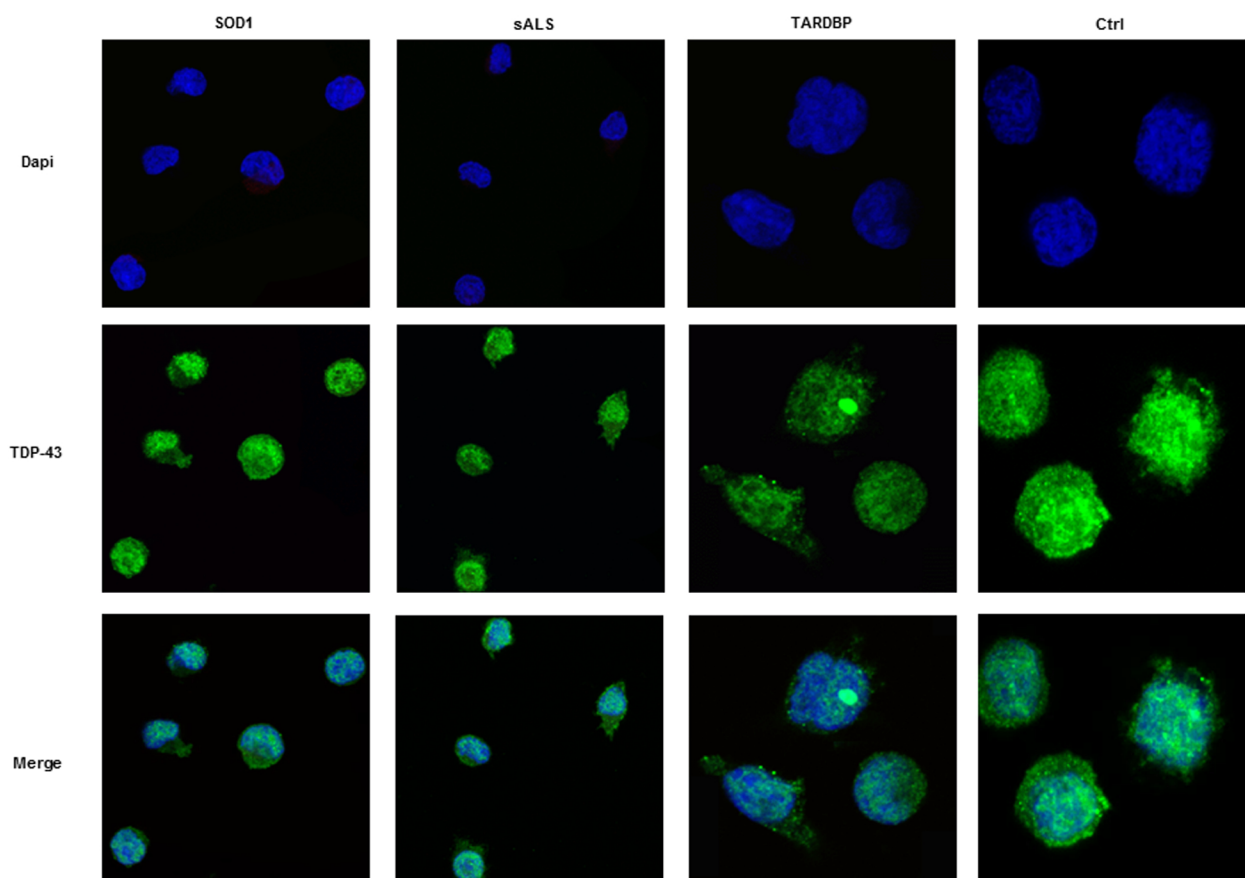


Fig. S3

**Fig. S3. SOD1, TARDBP and FUS mutations showed protein re-localization and aggregation in LCLs.**

Additional representative immunostaining of TDP-43 in LCLs of sALS, SOD1, TARDBP and FUS mutated patients.

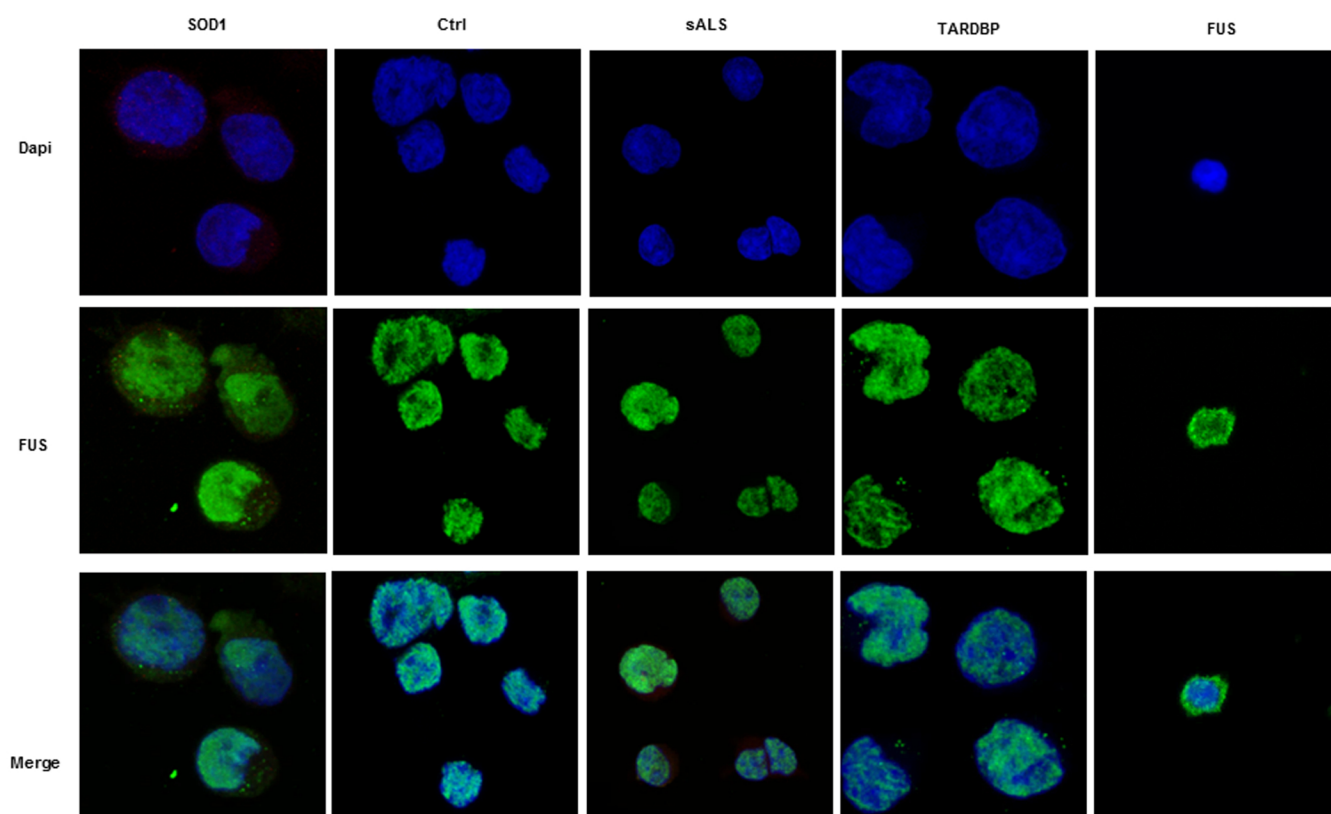
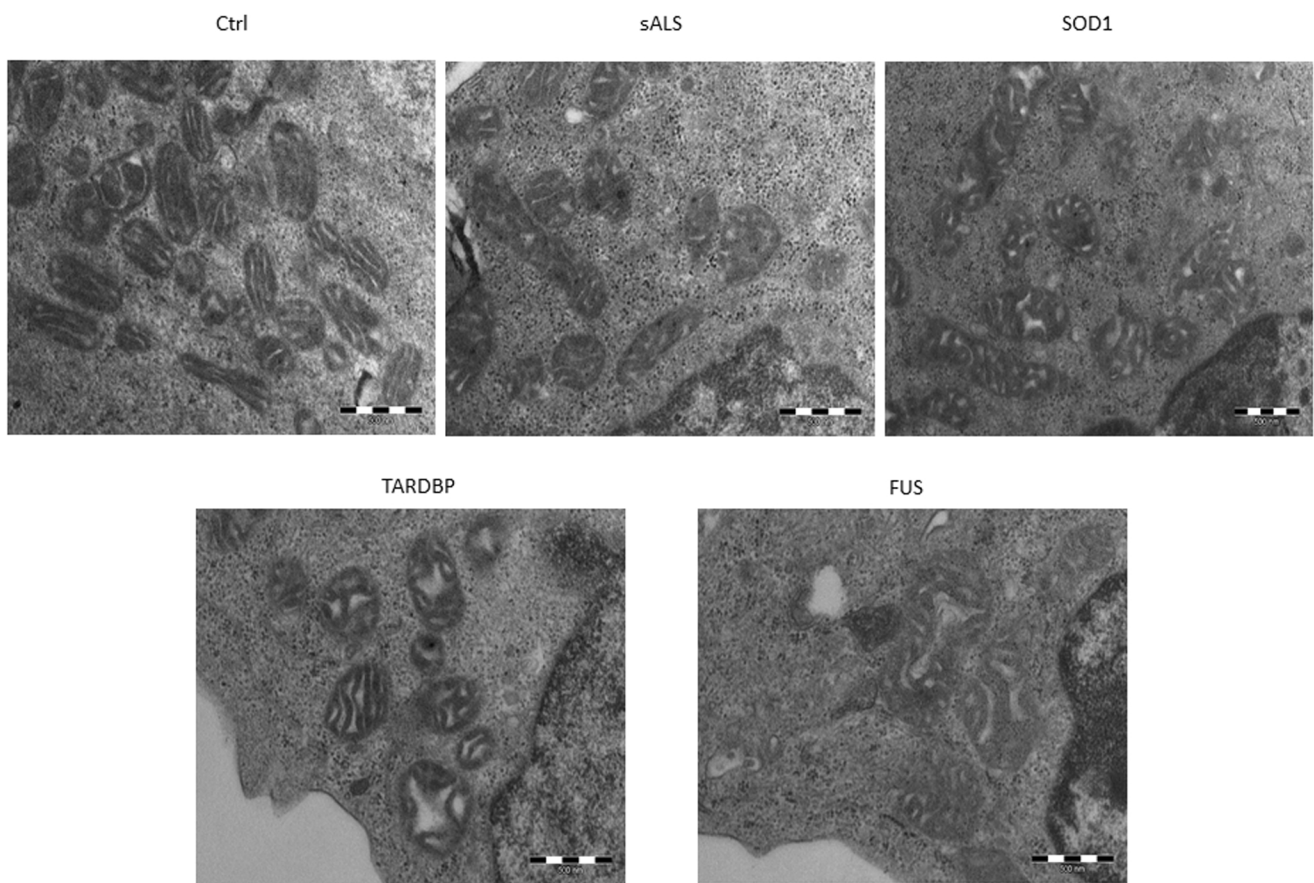


Fig. S4

**Fig. S4. SOD1, TARDBP and FUS mutations showed protein re-localization and aggregation in LCLs.**  
Additional representative immunostaining of FUS in LCLs of sALS, SOD1, TARDBP and FUS mutated patients.



**Fig. S5**

**Fig. S5. Mitochondria morphology of Ctrl, sALS, SOD1, TARDBP and FUS mutated LCLs.**

Additional representative images of transmission electron microscopy analysis from Ctrl, sALS, SOD1, TARDBP and FUS mutated patients.