

Figure e-1. Size exclusion chromatography combined with multi-angle light scattering (SEC-MALS) and transient protein expression in C2C12 cells. (A) SEC-MALS profiles of wild-type and mutant FLNc d23-24. While the FLNc d23-24 wt forms dimers in solution (expected molecular mass: 47.8 kDa), p.K2676Pfs\*3 mutant FLNc d23-24 (expected molecular mass: 36.8 kDa) displayed predominantly a monomeric state, with a non-symmetric elution profile suggesting a structural disorder and folding defects. (B) Transient expression of full-length wild-type or p.K2676Pfs\*3 FLNc variants in C2C12 cells. Statistical analysis of aggregate formation 24 h after transfection revealed that cells expressing mutant FLNc protein showed more frequent intracellular FLNc aggregates compared to cells expressing wild-type FLNc (p<0.0001).