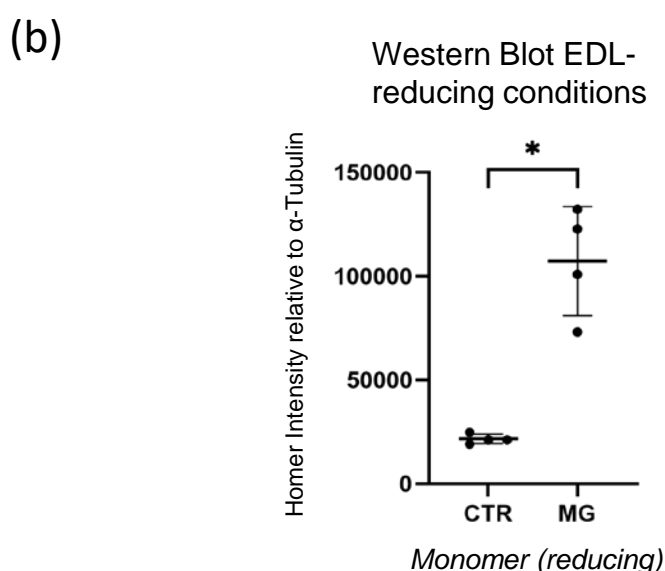
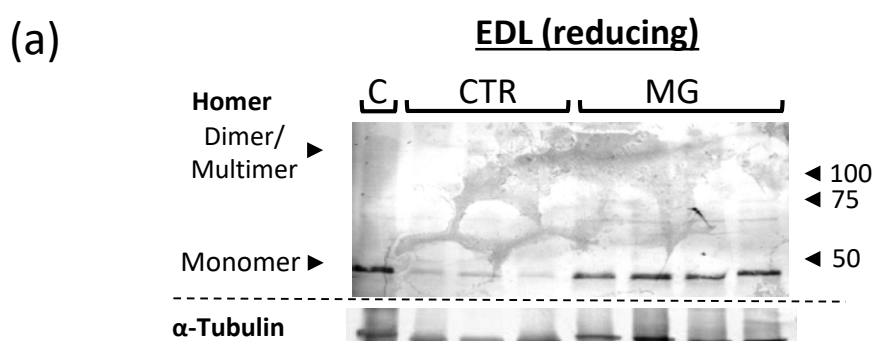


Western Blot EDL reducing experimental conditions



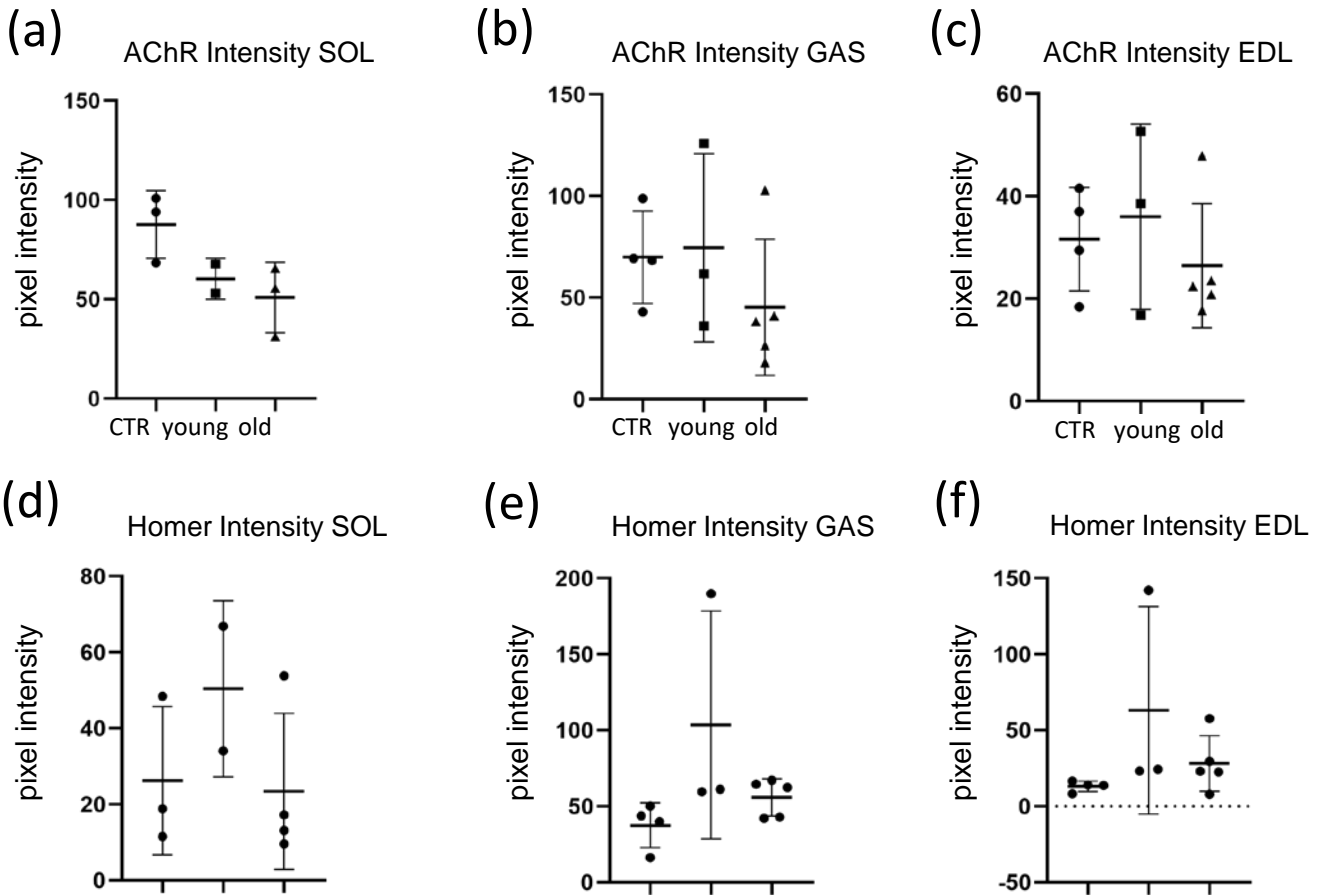
Supplement Figure S1:

Homer Western Blot analysis of *EDL* in *reducing* conditions.

(a): WB of *EDL*. Dimers/Multimers between 150 and 100kDa, Monomers (43-48kDa) below 50kDa. CTR samples 1-3 on the left, EAMG samples 1-4 on the right. α-Tubulin blot below was used for normalization. Line C= Homer monomer positive control (murine cerebellum).

(b): WB total protein concentration of Homer in *EDL*. In *EDL reducing*, Homer 42kDa band intensity is significantly increased (+416.49% %, $p < 0.05$) in EAMG compared to CTR. 120kDa band, representing multimers, is not present in *EDL* due to reducing detergents splitting up protein-protein interaction. * = indicates significant difference vs CTR (ANOVA $p \leq 0.05$).

OLD vs YOUNG



Supplement Figure S2:

nAChR degradation rate in endplates of hindlimb muscles EAMG vs CTR (a–c) and endplate-adjacent Homer protein (d–f) divided by age in young (28W) and old (70+w) mice. Results of confocal pixel intensity analysis, Alpha Bungarotoxin (α BTX) staining and Homer antibody staining. No significant results were seen in between age groups for both α BTX and Homer staining in neither of the three muscles.

Groups were $n=4$ for CTR, $n=3$ for young and $n=5$ for old mice.

Statistical differences between groups were determined by Mann-Whitney-U-Test. Significance vs CTR was considered at $p \leq 0.05$ (ANOVA).