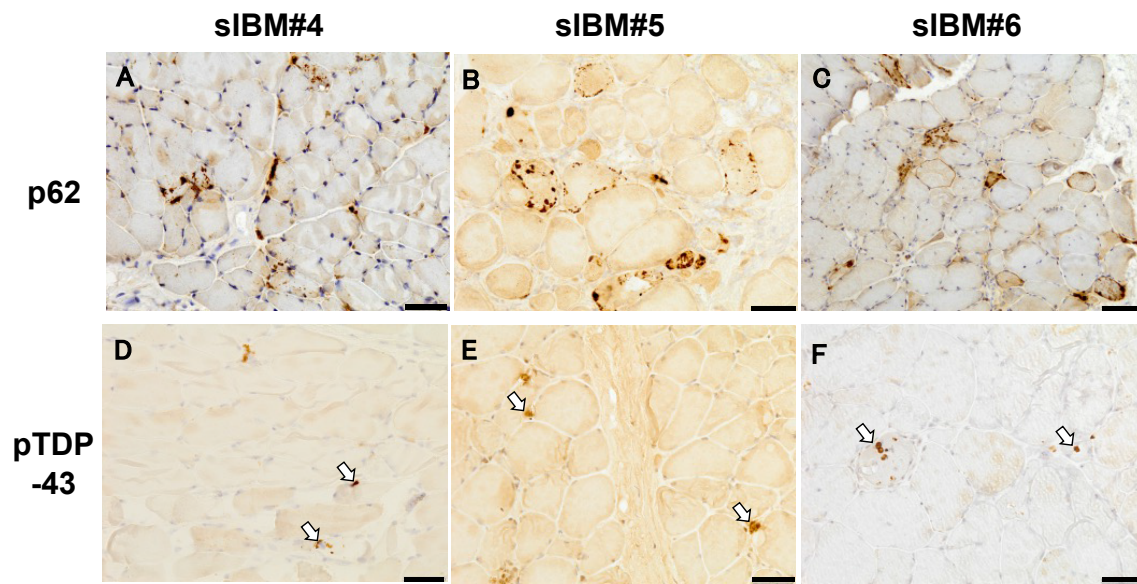


## **Supplemental Information**

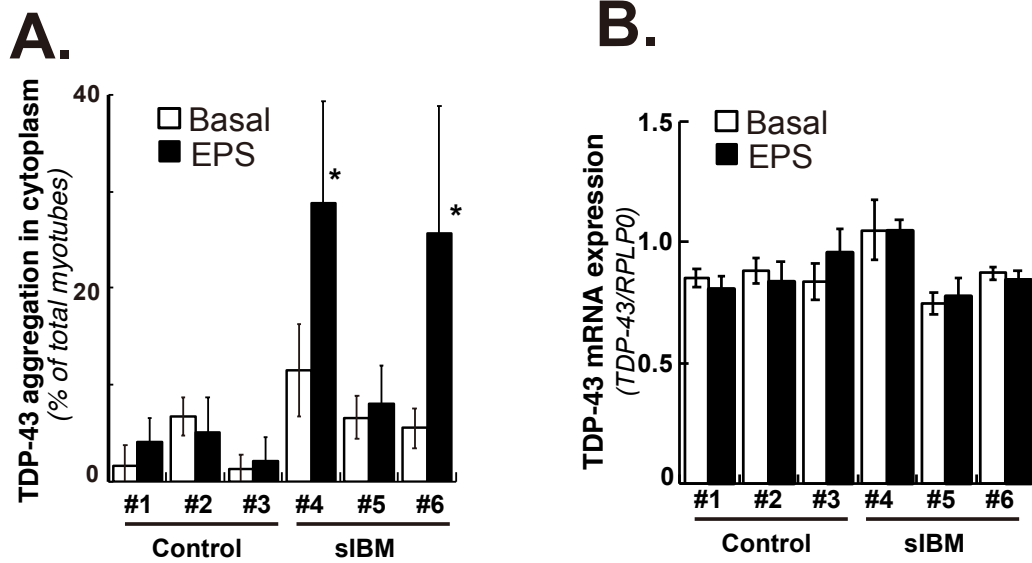
### **Feeder-supported in vitro exercise model using human satellite cells from patients with sporadic inclusion body myositis**

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**Figure S1. Immunohistochemical analysis of p62 (A-C) and TDP-43 (D-F) in three sIBM cases**

Immunohistochemical staining was performed as described in Methods. Note scattered p62-positive myofibers (A-C) and phospho-TDP-43 positive myofibers (arrows in D-F). Scale bars = 50  $\mu\text{m}$  (A-B, D-F) and 100 $\mu\text{m}$  (C).



**Figure S2. Cytoplasmic TDP-43 accumulation (A) and TDP-43 mRNA expression in myotubes from each of the subjects (related to Figure 4)**

(A) Quantification of the ratio of myotubes displaying cytoplasmic TDP-43 accumulations in the myotube was determined from 40-75 myotubes in three independent experiments as described in the legend for Figure 4. The statistical significance of differences was analyzed using the student t-test; \*  $p < 0.05$ , indicating the effects of EPS treatment.

(B) Total RNA was extracted and mRNAs for human TDP-43 and RPLP0 were evaluated by real-time PCR analysis. Data were normalized using human RPLP0 transcripts. This graph shows the results of three independent experiments performed using the same cell stock samples.