*Supplementary Figures:*

**Figure 1: Generation and characterization of rabbit polyclonal SLIMMER antibodies. A)** The rabbit polyclonal SLIMMER-specific antibody was raised to amino acids 284-297 in the unique C-terminal region of human SLIMMER (underlined). This rabbit polyclonal SLIMMER antibody has been designated α-SLIMMER[284-297]. **B-a)** To test specificity of the SLIMMER antibody, COS-1 cells were transfected with constructs encoding HA-SLIMMER. Cell lysates were prepared in Tris Saline lysis buffer with 1% Triton and immunoblotted with either affinity purified anti-SLIMMER peptide antibody (right) or pre-immune sera (left). Migration of HA-SLIMMER is indicated by arrow. ~50μg of protein was loaded. **B-b)** C2C12 myoblasts were prepared in Triton X-100 lysis buffer and immunoblotted with either affinity purified anti-SLIMMER peptide antibody (right) or pre-immune sera (left). Migration of endogenous SLIMMER is indicated by arrow. ~50μg of protein was loaded.

**Figure 2: SLIMMER alters Siva-1-induced nuclear morphology in C2C12 myoblasts (from Figure 6).** To confirm expression of HA- and GFP-tagged proteins in C2C12 myoblasts, duplicate samples of transfected C2C12 myoblasts were harvested for immunoblots, 24 hours post-transfection. Lysates were prepared in HEPES lysis buffer and immunoblotted with anti-HA, anti-GFP, or anti-Siva-1[82-94] antibody, or anti-actin and β-tubulin as indicated for protein loading control. Migration of HA-βgal and HA-SLIMMER is indicated by arrows.

*Supplementary Table 1: Oligonucleotides used in PCR amplification*

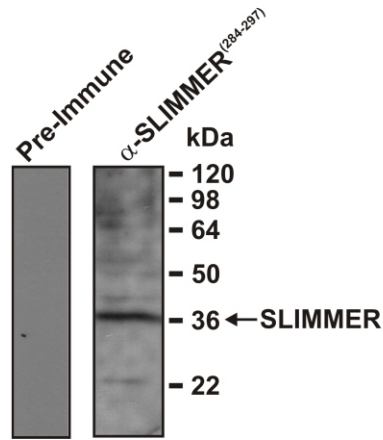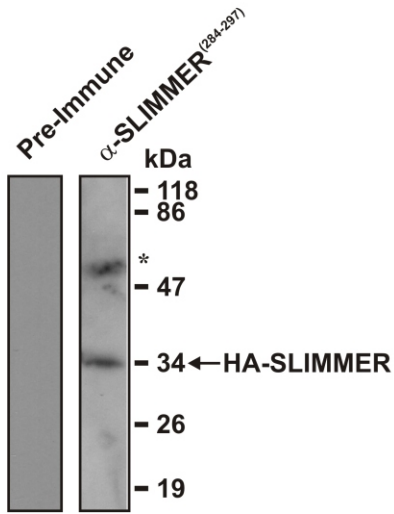| Construct | 5'-Oligo | 3'-Oligo | Reference Sequence |
|---|---|---|---|
| pGBKT7- LIM ½ 1+2+3 of FHL1/SLIMMER | ggaattcatggcggagaagtttgactgc | cggaattctcacttcttggccacaaagtt | 84-743bp of genebank entry U29538 |
| pGBKT7- LIM 3+4 of FHL1 | cggaattcatgcatgagaccaagttt | cggaattctcacagctttttggcaca | 543-923bp of genebank entry U29538 |
| pGBKT7- LIM 3+ER of SLIMMER | cggaattcatgcatgagaccaagttt | gcgaattcttattatcacggagcattttt tgcagtggaagcagtagtcgtgcc | 544-1056bp of genebank entry AF063002 |
| pGBKT7- 18aa+ER of SLIMMER | cggaattcatgtacaagaactttgtg | cgaattctcacggagcatttttgcagtgg | 721-1056bp of genebank entry AF063002 |
| pGBKT7-KyoT2 | cggaattcatgtcggagaagttcg | gcgaattcttattatcacggagcatttttt gcagtggaagcagtagtcgtgcc | Full Length (32) |
| pGEX-5x1-Siva-1 | ccttctagaacgcgtatgcccaagcggagctgcc | ccttctagaacgcgtttatcaggtctcgaacatgg | 70-597bp of genebank entry NM_006427 |
| pTrio12R-HEN | cctgctagccaccatggtgagcaagggcgagg | cctgctagcaggcctattaacgcgtagtccggcc ggacttgtacagc | pEGFP-C2 (Clontech) |

**A**

**SLIMMER**

3x NLS  NES  RBP-J  **Rabbit Polycloncal α-SLIMMER**
                     **antibody epitope**
$^{284}$YRKNRSLAAPRGPG$^{297}$  **(α-SLIMMER$^{(284-297)}$)**

**B-a)** COS-1 cells

Pre-Immune
α-SLIMMER$^{(284-297)}$

kDa
— 118
— 86
*
— 47
— 34 ←HA-SLIMMER
— 26
— 19

**B-b)** C2C12 Myoblasts

Pre-Immune
α-SLIMMER$^{(284-297)}$

kDa
— 120
— 98
— 64
— 50
— 36 ←SLIMMER
— 22