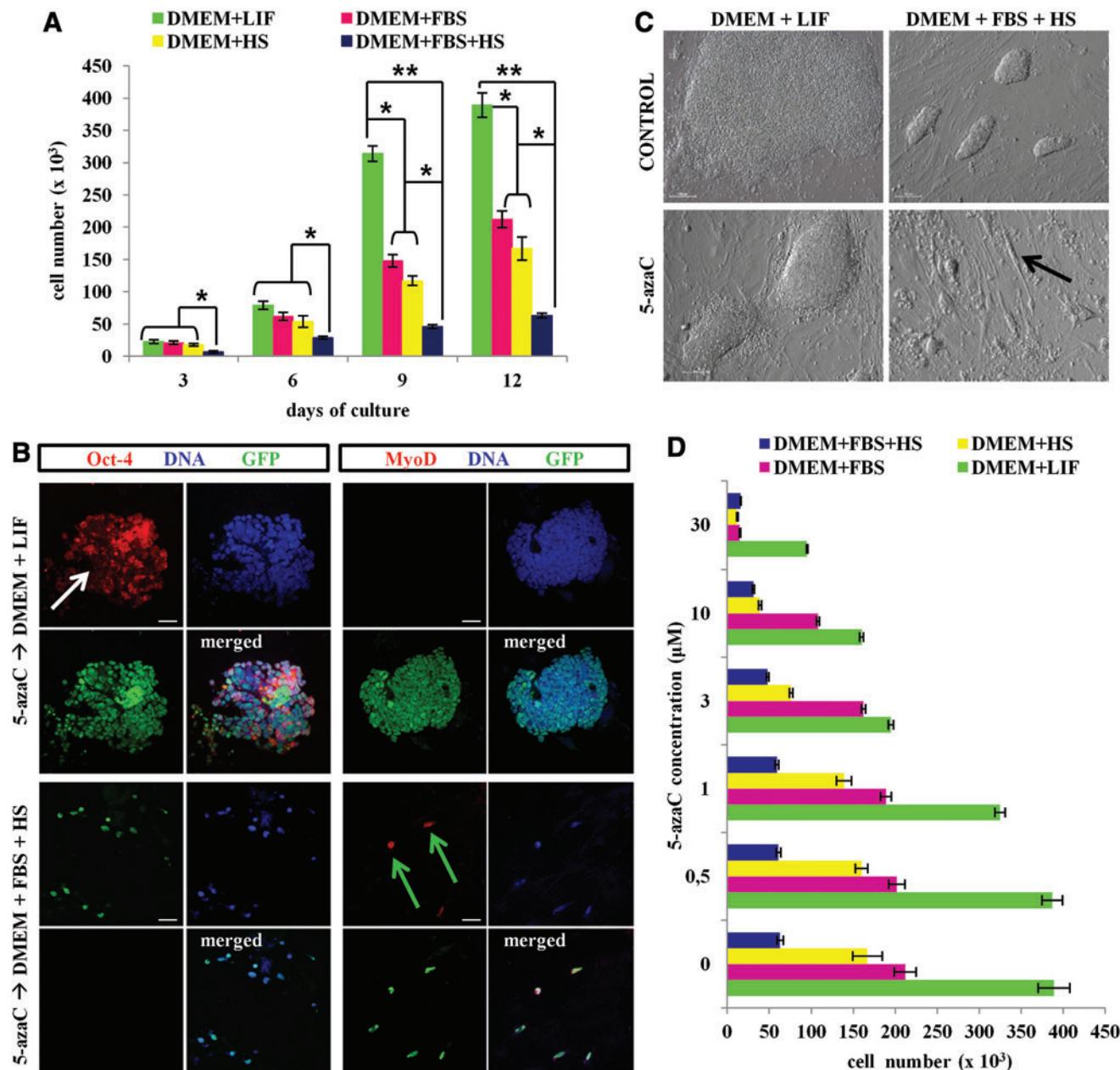
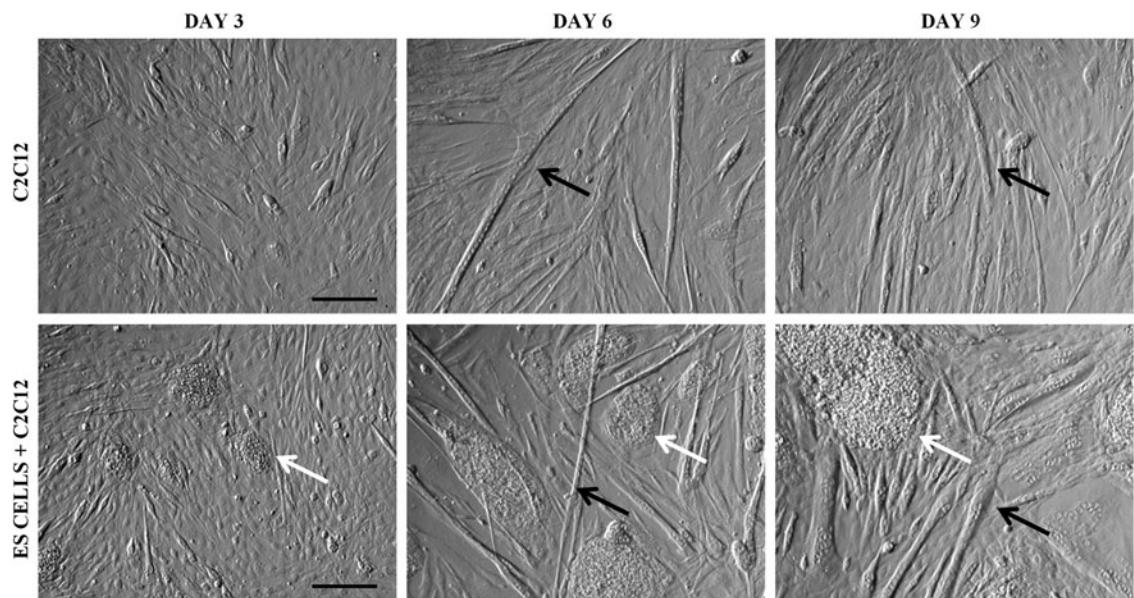


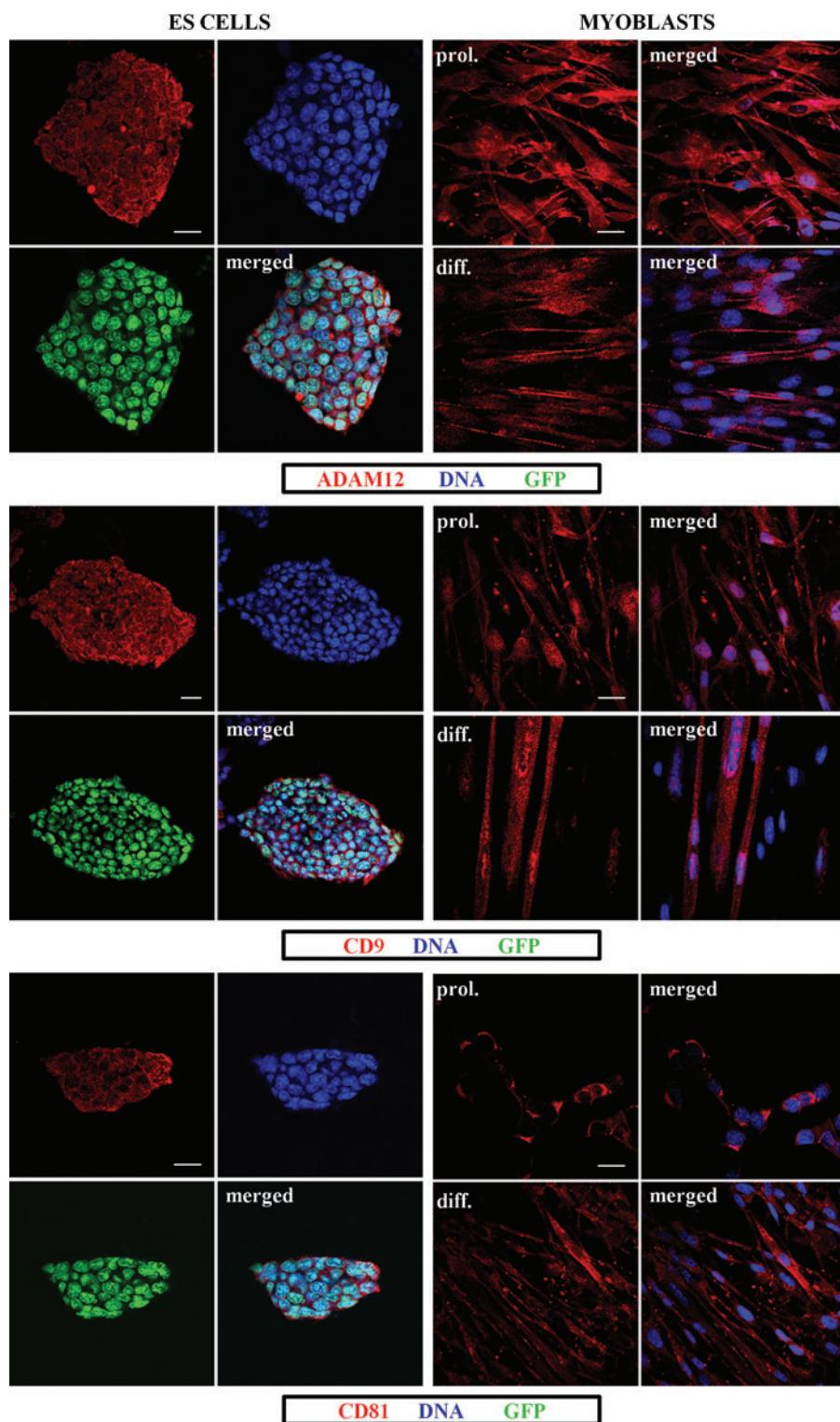
Supplementary Data



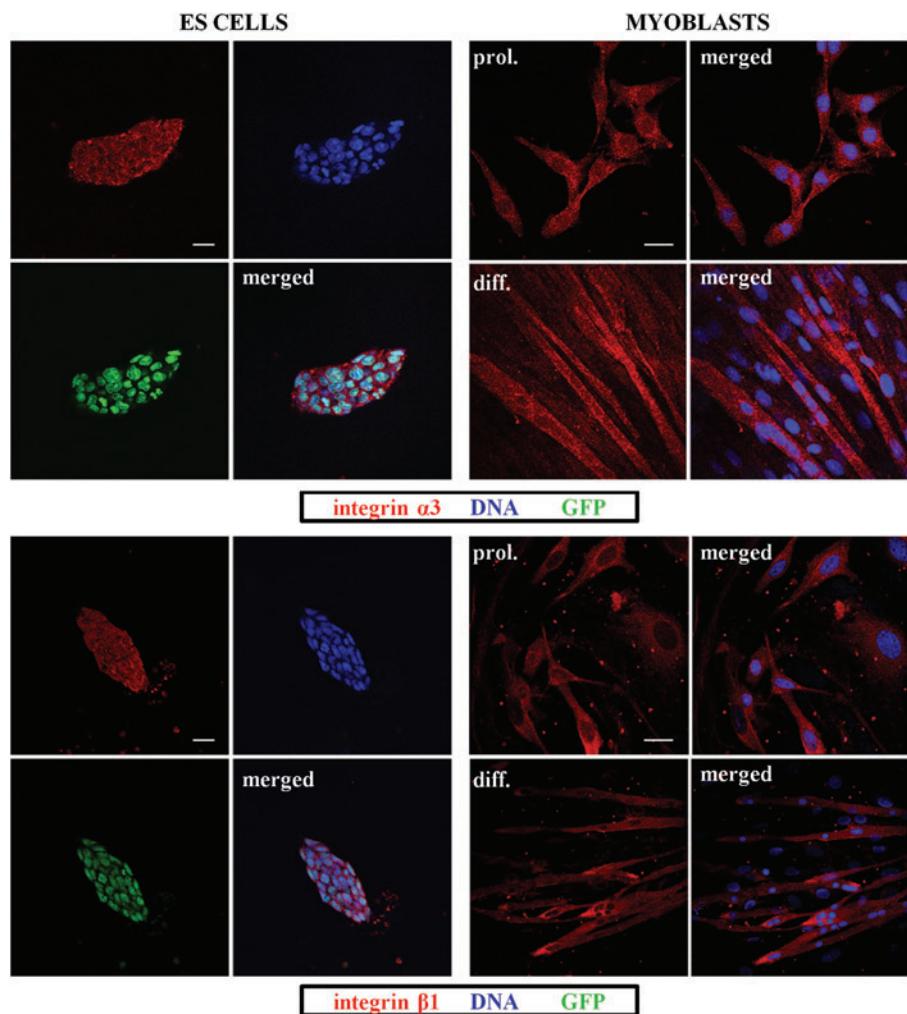
SUPPLEMENTARY FIG. S1. Behavior of embryonic stem (ES)-green fluorescent protein (GFP) cells in different culture conditions. **(A)** Number of ES-GFP cells after 3, 6, 9, and 12 days of culture in different media; * $P<0.05$; ** $P<0.01$. Three independent experiments were performed. **(B)** Immunofluorescent detection of Oct-4 and MyoD in ES-GFP cells pretreated with 10 μ M 5-azaC and then cultured in DMEM + LIF or DMEM + FBS + HS for 12 days. White arrow indicates cells devoid of pluripotency marker Oct-4; green arrows indicate nuclei positive for MyoD. Scale bar, 20 μ m. **(C)** Morphology of ES-GFP cell colonies pretreated with 5-azaC and then cultured in DMEM + LIF or DMEM + FBS + HS for 12 days. In control cultures, incubation with 5-azaC was omitted. Black arrow indicates one of the elongated cells observed among ES cells treated with 5-azaC and cultured in DMEM + FBS + HS (or DMEM + HS). Scale bar, 100 μ m. **(D)** The number of ES-GFP cells pretreated with different concentrations of 5-azaC and then cultured in different types of media for 12 days. Three independent experiments were performed.



SUPPLEMENTARY FIG. S2. Co-culture of ES cells and myoblasts. Morphology of ES-GFP cells and C2C12 myoblasts after 3, 6, and 9 days of co-culture (*lower row*). *White arrows* indicate ES cells colonies; *black arrows* indicate myotubes. A control myoblast culture is shown in the *upper row*. Scale bar, 100 μ m.



SUPPLEMENTARY FIG. S3. Immunolocalization of ADAM12, CD9, and CD81 in ES-GFP cells and myoblasts. “prol.” indicates images showing localization of analyzed proteins in proliferating C2C12 or SC-derived myoblasts; “diff.” indicates presence of proteins in differentiating myoblasts. Scale bar, 20 μ m.



SUPPLEMENTARY FIG. S4. Immunolocalization of integrin $\alpha 3$ and $\beta 1$ in ES-GFP cells and myoblasts. “prol.” marks images showing localization of analyzed proteins in proliferating C2C12 or SC-derived myoblasts; “diff.” indicates images showing presence of proteins in differentiating myoblasts. Scale bar, 20 μm .

SUPPLEMENTARY TABLE S1. PRIMERS USED IN REVERSE TRANSCRIPTION-POLYMERASE CHAIN REACTION

| Gene | Sequence | Product size (bp) | Annealing temperature (°C) | References |
|---------------|----------------------------------|-------------------|----------------------------|------------|
| <i>Oct-4</i> | 5' GAAGTTGGAGAACGGTGGAAACC 3' | 450 | 55 | 1 |
| | 5' AACCAACATCCTCTCTAGGCC 3' | | | |
| | 5' GGCGTTCTCTTGAAAGGTGTC 3' | 312 | 55 | 2 |
| | 5' CTCGAACCACATCCTCTCT 3' | | | |
| <i>Nanog</i> | 5' AGGGTCTGCTACTGAGATGCTCTG 3' | 363 | 59 | 3 |
| | 5' CAACCACTGGTTTTCTGCCACCG 3' | | | |
| | 5' CAGGTGTTTGAGGGTAGCTC 3' | 222 | 52 | 4 |
| | 5' CGGTTCATCATGGTACAGTC 3' | | | |
| <i>Sox2</i> | 5' GGCGGCACCAGAACAG 3' | 414 | 55 | 5 |
| | 5' GTTGCTCCAGCCGTTATGTG 3' | | | |
| <i>Pax3</i> | 5' GCTGTCTGTGATCGGAACACT 3' | 417 | 55 | 6 |
| | 5' CTCCAGCTTGTCTCCATC 3' | | | |
| | 5' GCTGTCTGTGATCGGAACACTG 3' | 509 | 62 | 7 |
| | 5' GTCTCCGACAGCTGGTATGTTG 3' | | | |
| <i>Pax7</i> | 5' CTGGATGAGGGCTCAGATGT 3' | 243 | 52 | 6 |
| | 5' GTTCTAGCTCCTGCCTGCTTA 3' | | | |
| | 5' CAAGAGGTTTATCCAGCCGAC 3' | 498 | 57 | 7 |
| | 5' GAGGGCACCGTGCTTCGGTC 3' | | | |
| <i>MyoD</i> | 5' ACATAGACTTGACAGGCCCGA 3' | 450 | 52 | 8 |
| | 5' AGACCTTCGATGTAGCGGATGG 3' | | | |
| | 5' GCCCGCGCTCCAAC TGCTCTGAT 3' | 397 | 59 | 9 |
| | 5' CCTACCGGTGGTGC GCGCCCTCTGC 3' | | | |
| <i>Myf-5</i> | 5' GAGCCAAGAGTAGCAGCCTCG 3' | 440 | 54 | 8 |
| | 5' GTTCTTCGGGACCAAGACAGGG 3' | | | |
| | 5' TGCCATCCGCTACATTGAGAG 3' | 353 | 59 | 9 |
| | 5' CCGGGGTAGCAGGCTGTGAGTTG 3' | | | |
| <i>Myog</i> | 5' CCATCCAGTACATTGAGCGCTA 3' | 550 | 55 | 8 |
| | 5' GGGGCTCTCTGGACTCCATCTT 3' | | | |
| | 5' GGGCCCTGGAAAGAAAAG 3' | 364 | 55 | 9 |
| | 5' AGGAGGCGCTGTGGGAGTT 3' | | | |
| <i>Mrf4</i> | 5' CTGCGCAAAGGAGGAGACTAAAG 3' | 367 | 55 | 10 |
| | 5' ATGGAAGAAAGGCCTGAAGACTG 3' | | | |
| | 5' CTACATTGAGCGTCTACAGGACC 3' | 234 | 55 | 11 |
| | 5' CTGAAGACTGCTGGAGGCTG 3' | | | |
| <i>Ncam</i> | 5' TGTCAAGTGGCAGGAGATGC 3' | 137 | 52 | 12 |
| | 5' GGCCTTGTAGATGGTGAAGGGT 3' | | | |
| <i>Vcam-1</i> | 5' ACACTCTTACCTGTGCGCTGT 3' | 304 | 57 | 13 |
| | 5' ATTTCGGGTATCTCAATGG 3' | | | |
| <i>Itga3</i> | 5' AAGCCAAATCTGAGACTGTG 3' | 660 | 47 | 14 |
| | 5' GTAGTATCGGTCCAATCT 3' | | | |
| <i>Itgb1</i> | 5' TGTGGAGACTCCAGACTGCTCTACT 3' | 247 | 57 | 14 |
| | 5' TCATTTCCCTCATACTTCGGATT 3' | | | |
| <i>Mcad</i> | 5' CCACAAACGCCTCCCCCTACCCACTT 3' | 446 | 58 | 10 |
| | 5' TCGTCGATGCTGAAGAACTCAGGGC 3' | | | |
| <i>Adam12</i> | 5' CACGAATCGCTGTAAACGCTA 3' | 396 | 49 | 15 |
| | 5' CTCTCAGCTCACATTGGCGAAGGC 3' | | | |
| <i>Cd9</i> | 5' GAGCATGCCGTCAAAGGAGGTAG 3' | 685 | 58 | 16 |
| | 5' TCAGCACATTCTCGGCTCC 3' | | | |
| <i>Cd81</i> | 5' AGTACACGGAGCTGTCCGG 3' | 304 | 52 | 17 |
| | 5' ATGGGAGTGGAGGGCTGCAC 3' | | | |
| <i>GAPDH</i> | 5' ACTCCACTCACGGCAAATT 3' | 385 | 59 | 7] |
| | 5' ACTGTGGTCATGAGCCCTTC 3' | | | |

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