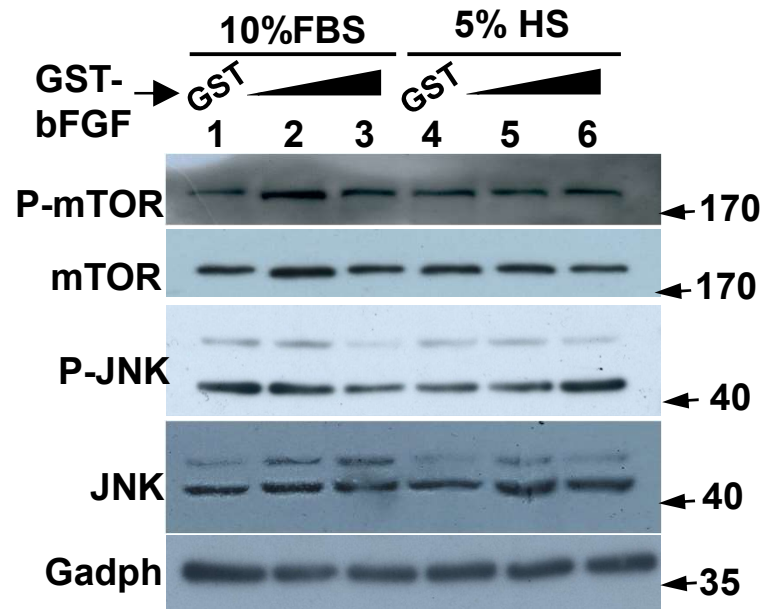
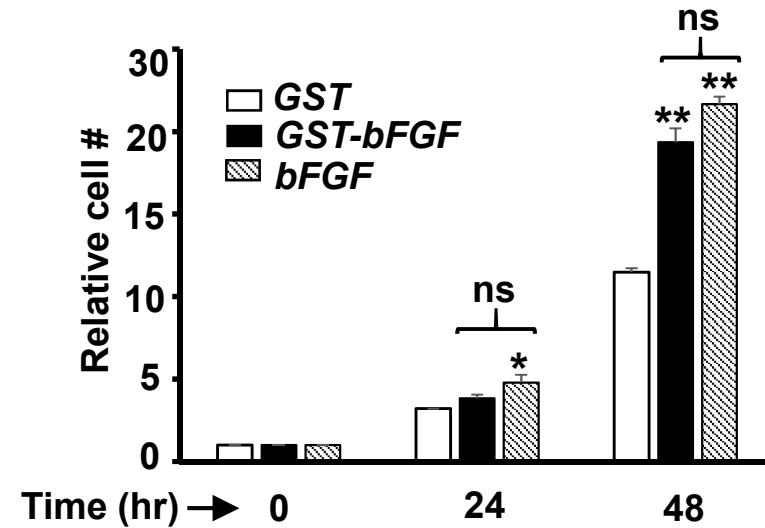


# Supplementary Figure S1

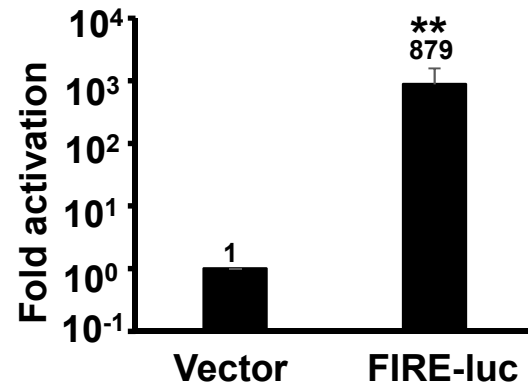
(A)



(C)

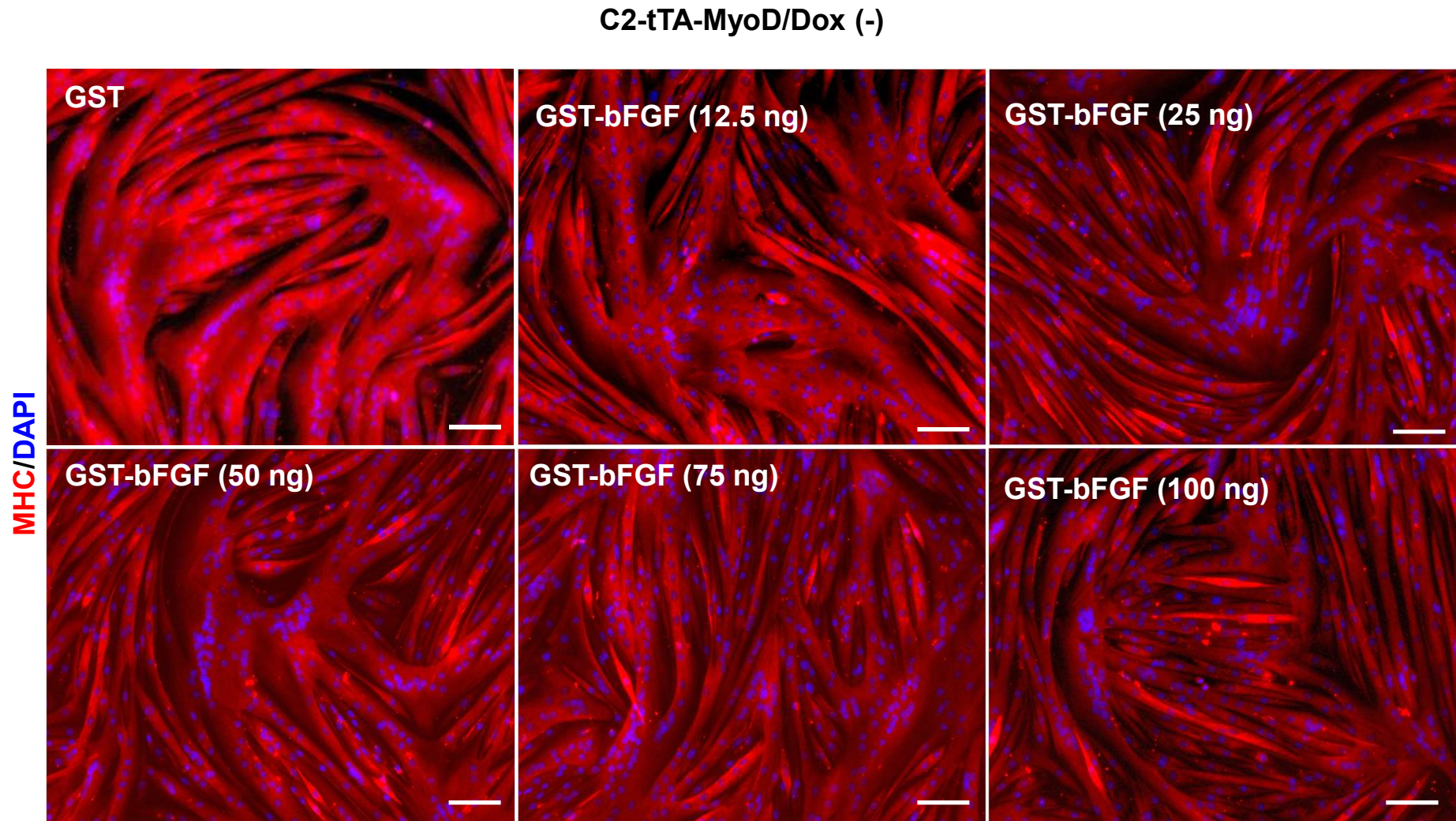


(B)



**Supplementary Figure S1: The effect of GST-bFGF on cell signaling and proliferation.** (A) C2C12 myoblasts in both growth medium (GM, 10% FCS) and differentiation medium (DM, 5% HS) were treated with GST (100 ng/ml) or GST-bFGF (50 and 100 ng/ml) for 24 h. The signaling proteins in total lysate were examined by Western blot and the signal of Gapdh served as input control. (B) The pGL3-basic vector and FGF reporter FIRE-luc were transfected into C2C12 and kept in GM with GST (50 ng/ml) for 48 hr before harvested for luciferase activity assay. The activity in pGL3-basic vector transfected cells was set as 1-fold activation. \*\*: p < 0.01 vs. vector. (C) C2C12 myoblasts in GM were treated with GST or GST-bFGF protein (25 ng/ml) for 24~48 hr and their relative cell numbers at 24 and 48 hr after seeding were examined. The initial cell number (time=0) was set as 1-fold. \* and \*\*: p < 0.05 and p < 0.01 vs. GST-treated cells. N=2 for this proliferation assay.

## Supplementary Figure S2



**Supplementary Figure S2: The morphology of C2-tTA-MyoD myotubes.**

C2-tTA-MyoD cells were induced to differentiation in DM and treated with various doses of GST-bFGF (as indicated) for 4 days in the absence of Dox.

**Supplementary table SI: Primer sets used in the qRT-PCR and cloning.**

<b>Gene name</b>	<b>Primer Sequence</b>	<b>NCU code</b>	<b>Amplicon Size (bp)</b>
<i>m36B4</i>	FP:5'-GAACGTGGGCTTCGTGTTCA-3' RP:3'-AGCCTGGAAGAAGGAGGTCT-3'	014023 014024	167
<i>MyoD</i>	FP:5'-CTCCAAGTGTCTGATGGCATG-3' RP:3'-CTCGACACAGCCGCACTCTTC-3'	002021 002022	135
<i>Myf5</i>	FP:5'-TGCACCACCACCAACCCTAA-3' RP:5'-CAGGGCTGTTACATTTCAGG-3'	015052 015053	196
<i>Myogenin</i>	FP:5'-CCAGTGAATGCAACTCCCACAGC-3' RP:5'-AGACATATCCTCCACCGTGA-3'	006012 006013	166
<i>c-Myc</i>	FP:5'-GCTGGATTTCTTTGGGCGT-3' RP:5'-AATAGGGCTGTACGGAGTCG-3'	021018 021019	112
<i>CyclinD1</i>	FP:5'-TTGACTGCCGAGAAGTTGTG-3' RP:5'-CTGGCATTCTTGGAGAGGAAG-3'	054009 054010	154
<i>p21</i>	FP:5'-GCCGAAAACGGAGGCAGAC-3' RP:5'-AAGATGGGGAAGAGGCCTCCTGA-3'	006007 006008	139
<i>Pax3</i>	FP:5'-ACTACCCAGACATTTACACCAGG-3' RP:5'-AATGAGATGGTTGAAAGCCATCAG-3'	066021 066022	146
<i>Pax7</i>	FP:5'-TGGGGTCTTCATCAACGGTC-3' RP:5'-ATCGGCACAGAATCTTGGAGA-3'	066007 066008	143
<i>Myostatin</i>	FP:5'-AGTGGATCTAAATGAGGGCAGT-3' RP:5'-GTTTCCAGGCGCAGCTTAC-3'	066035 066036	144
<i>c-Fos</i>	FP:5'-CAGAGCGGGAATGGTGAAGA-3' RP:5'-CTGTCTCCGCTTGGAGTGTA-3'	066001 066002	188
<i>bFGF</i> CDS (outer)	FP: 5'-ACACGGACTGGGAGGCTGGC-3' RP: 5'-TGACAGTGTCTCAGTGACAGTGTC-3'	0360010 0360011	615
<i>bFGF</i> CDS (inner)	FP: 5'-ATGGCTGCCAGCGGCATCACCTCGCTT-3' RP: 5'-gtcgacGCTCTTAGCAGACATTGG-3'	036009 036006	468