Plate 1: Isolation of plasmid

a. Bacterial culture plate showing transformed bacterial cell colonies
b. Plasmid polymerase chain reaction product on 2% agarose gel
   c. HuSH plasmid DNA on 0.8% agarose gel.
   d. Colony polymerase chain reaction product on 2% agarose gel.

L1 : shA construct
L2 : shB constructs
L3 : shC construct
L4 : shD constructs
L5 : shE
L6 : Scramble
M1 : 1 kb ladder
M2 : 100 bp ladder
N : Negative
Plate 2: Caprine myoblast cells

a. Portion of a rectus abdominis muscle from a goat
b. Splitting of myoblast cells (100X)
c. Purification of myoblast cells (shown by an arrow) with percoll gradient
d. 70-80% confluency of myoblast cells in normal filter (100X)
e. Subcultured myoblast cells (100X)
f. Transfected myoblast cells in GFP filter (100X)
Plate 3: 496 bp band of GAPDH on 1% agarose gel to check cDNA integrity

- L1: shA construct
- L2: shB construct
- L3: shC construct
- L4: shD construct
- L5: shE
- L6: Scramble
- L7: Mock
- M: 100 bp ladder
Plate 4: Confirmation of primer specificity by 2% agarose gel for GAPDH, MSTN, MyoG and Myf-5

a. 69 bp for GAPDH  b. 100 bp for MSTN

c. 172 bp for MyoG  d. 103 bp for Myf-5

L1  :  shA
L2  :  shB
M  :  100 bp DNA ladder
Plate 5: Confirmation of primer specificity by 2% agarose gel for MyoD, FST and DCN

a. 231 bp for MyoD  
b. 80 bp for FST  
c. 134 bp for DCN  

L1 : shA  
L2 : shB  
M : 100 bp DNA ladder
Figure 3: Dissociation curve of real time PCR

- a. GAPDH
- b. MSTN
- c. DCN
- d. FST
Figure 3: Dissociation curve of real time PCR

e. Myf-5
f. MyoD
g. MyoG
Figure 4: Amplification plot of real time PCR

a. Amplification plot for MyoD, Myf-5 and MyoG

b. Amplification plot for GAPDH, MSTN, DCN and FST
Figure 1: Map of shRNA cloning pGFP-V-RS vector
Figure 2: Short hairpin RNA (secondary structure) constructs used for transformation
Figure 5: Expression profile of different myogenic genes in shRNA transfected caprine myoblast cells

* Significant at $P \leq 0.05$ level.
** Significant at $P \leq 0.01$ level.