## **Supplementary Information**

## **Title Page**

Platelet-rich plasma enhances the repair capacity of muscle-derived mesenchymal stem cells to large humeral bone defect in rabbits

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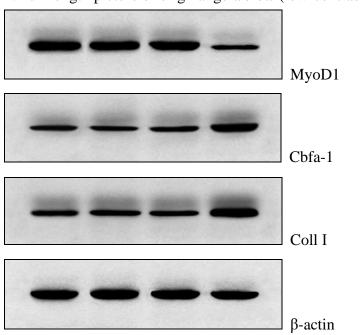
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	Items	Socre
Bone connection	No connections	0
	Fibrous connections	1
	Connections of bone and bone-like tissue	2
	Connections of bones	3
	Complete bone regeneration	4
Cancellous bone		
	No activity of osteocytes	0
	Early aggregation of new bone	1
	Activity of new bone aggregation	2
	Cancellous bone is remoulding	3
	Cancellous bone remoulds completely	4
Cortical bone	No growth of continual home	0
	No growth of cortical bone	0
	Early growth of cortical bone	1
	Cortical bone is remoulding	2
	Most Cortical bone completes remoulding	3
	Cortical bone remoulds completely	4

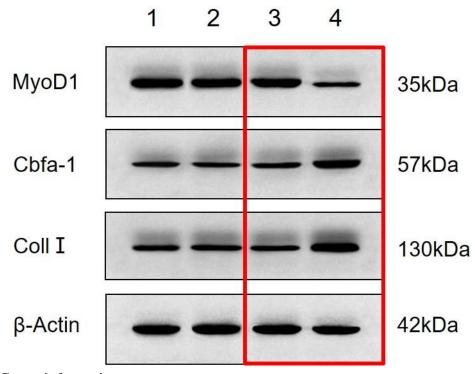
Supplementary Table 1. Lane-Sandhu histological evaluation scale

## For gels/blots quality check

1. Full length picture of original gels/blots (low-contrast)



2. Combination and cropping



## Group information:

- 1. M-MSCs treated with 1% FBS (Hyclone)
- 2. M-MSCs treated with 10% FBS (Gibco)
- 3. M-MSCs treated with 10% FBS (Hyclone)
- 4. M-MSCs treated with PRP.

Group 1. 2. 3 were set to explore the effects of different concentration of FBS or FBS

from different brand on the differentiation of M-MSCs. Due to no significant differences were observed, this part was deleted. The red border stands for the cutline of cropping.