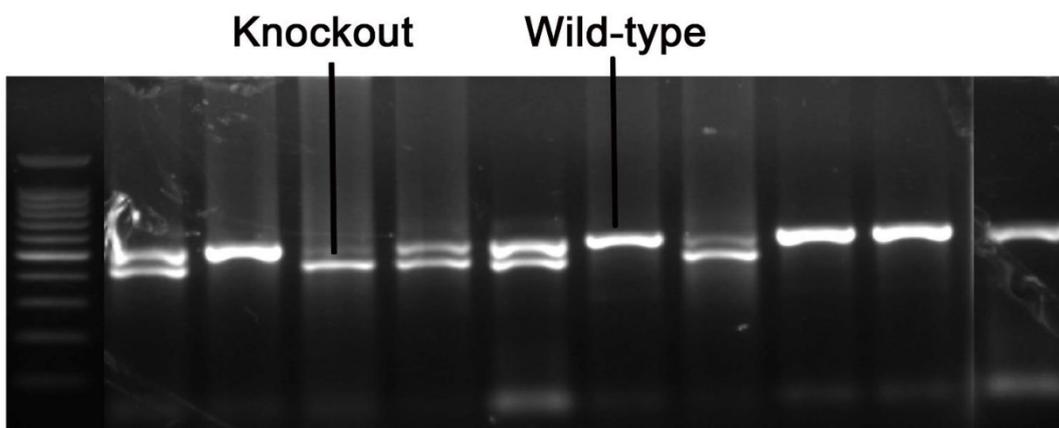


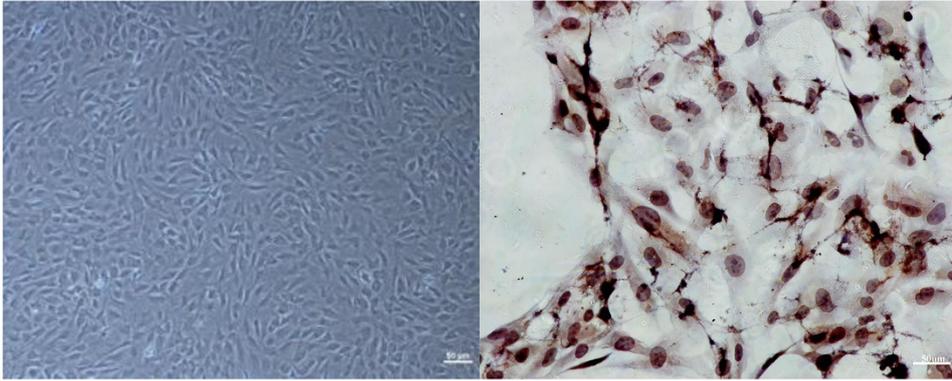


## Supplementary Material

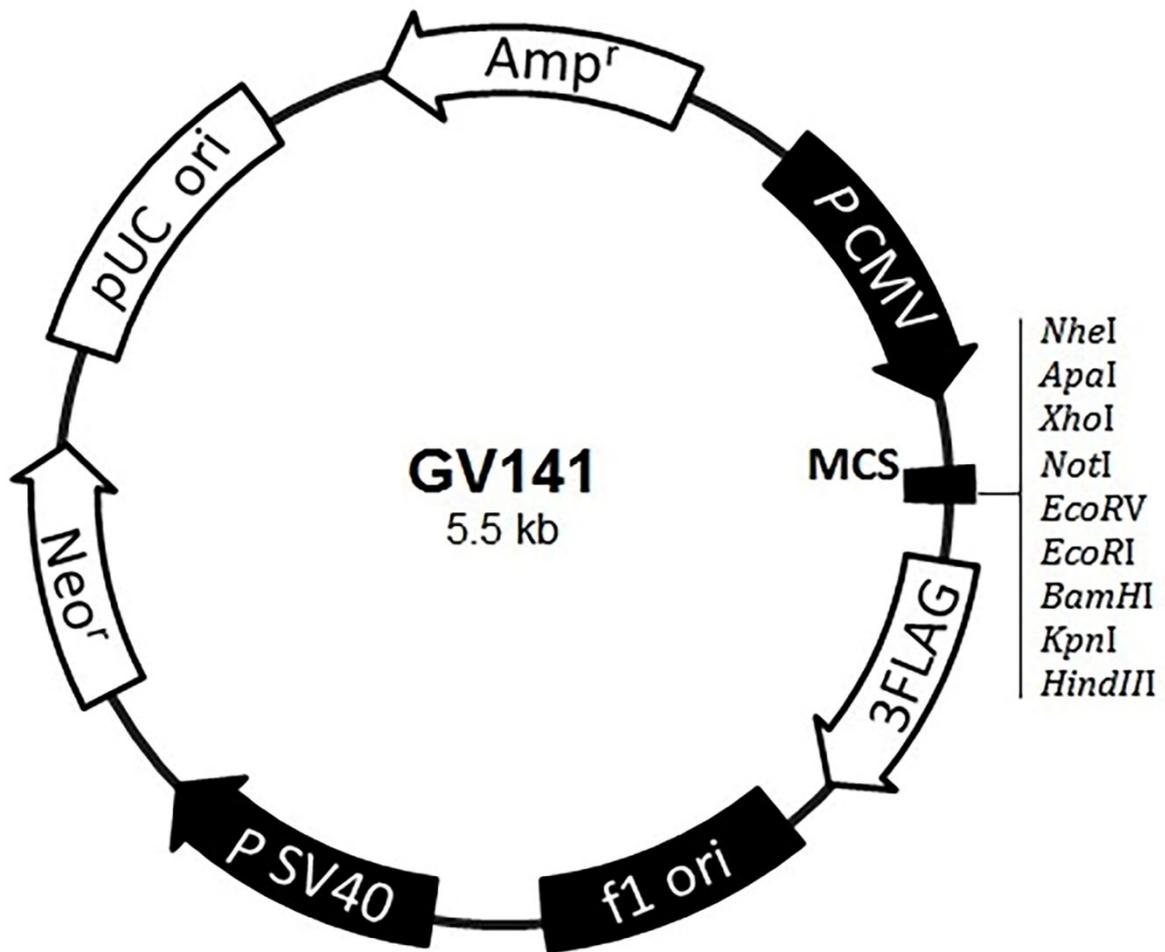
10.1302/2046-3758.910.BJR-2020-0140.R1



**Fig. a.** Genotyping mice tail DNA samples by polymerase chain reaction (PCR) amplification. The upper and lower fragments represent the amplification products of the microRNA miR-21-5p expressing and silencing regions, respectively. Wild-type mice (miR-21-5p<sup>+/+</sup>, WT) and miR-21-5p deficient (miR-21-5p<sup>-/-</sup>, KO) mice were identified for the following experiments.



**Fig. b.** Primary mouse condylar chondrocytes (MCCs) and immunocytochemical identification of type II collagen.



**Fig c.** Structural image of GV141 plasmid.

**Table i.** GV141 plasmid location and sequences.

<b>GV141 plasmid location</b>	<b>Data</b>
General length	5508 bp
CMV promoter	4269-4856 bp
MCS	4932-5037 bp
3FLAG	5042-5113 bp
BGH poly A	5145-5369 bp
f1 ori	5415-335 bp
SV40 promoter	340-683 bp
Neomycin	745-1539 bp
SV40 poly A	1713-1843 bp
PUC ori	2896-2226 bp
Ampicillin	3901-3041 bp
AmpR promoter	3971-3943 bp
<b>Primer sequences</b>	
CMV-F (4806-4826)	CGCAAATGGGCGGTAGGCGTG
BGH (5156-5139)	TAGAAGGCACAGTCGAGG

AmpR, ampicillin resistance gene; BGH, bovine growth hormone; CMV, cytomegalovirus;

F: forward; MCS, multiple cloning site; ori: origin; SV40, simian virus 40.