



Supplementary Material

10.1302/2046-3758.108.BJR-2019-0308.R2

Table i. Primer sequences for human quantitative reverse transcription polymerase chain reaction.

Gene	Primer sequences (5' to 3')
<i>miR-183</i>	Forward: GCGGCGGTATGGCACTGGTAGA
	Reverse: GCGGGTGCAGGGTCCGAGGT
<i>TGFα</i>	Forward: AATCCATCAGCAGGGATCTG
	Reverse: GATTTGGCCTGAAATGCCTA
<i>CCL2</i>	Forward: CAGCCAGATGCAATCAATGCC
	Reverse: TGGAATCCTGAACCCACTTCT
<i>CCR2</i>	Forward: TTGTGGGCAACATGATGG
	Reverse: CTGTGAATAATTTGCACATTGC
<i>U6</i>	Forward: CTCGCTTCGGCAGCACA
	Reverse: AACGCTTCACGAATTTGCGT
<i>GAPDH</i>	Forward: ACCTGCCAAATATGATGACATC
	Reverse: GTATCCAGTGCAGGGTCC

CCL2, C-C motif chemokine ligand 2; CCR2, C-C chemokine receptor 2; GAPDH, glyceraldehyde-3-phosphate dehydrogenase; miR-183, microRNA-183; TGF α , transforming growth factor α .

Table ii. Mouse primer sequences for quantitative reverse transcription polymerase chain reaction.

Gene	Primer sequences (5' to 3')
<i>miR-183</i>	Forward: CGCGTATGGCACTGGTAGAA
	Reverse: AGTGCAGGGTCCGAGGTATT
<i>TGFα</i>	Forward: TGATACTGCTGCCAGGTC
	Reverse: ATCTCTGGCAGTGCTGTCCT
<i>TNF-α</i>	Forward: CTGAACTTCGGGGTGATCGG
	Reverse: GGCTTGTCCTCGAATTTTGAGA
<i>IL-1β</i>	Forward: ATGGCAGAAGTACCTAAGCTCGC
	Reverse: ACACAAATTGCATGGTGAAGTCAGTT
<i>IL-6</i>	Forward: ATGAACTCCTTCTCCACAAGCGC
	Reverse: GAAGAGCCCTCAGGCTGGACTG
<i>TRPV1</i>	Forward: GTGGACAGCTACAGTGAGATAC
	Reverse: CACCATGGAAGCCACATACT
<i>Nav1.3</i>	Forward: AGCTTGGCCTGGCAAACGTG
	Reverse: ATGCCGACCACGGCAAAAATG
<i>Nav1.7</i>	Forward: ACGGATGAATTCAAAAATGTACTTGCAG
	Reverse: GTTCTCGTTGATCTTGCAAACACA
<i>Nav1.8</i>	Forward: ACCGACAATCAGAGCGAGGAG
	Reverse: ACAGACTAGAAATGGACAGAATCACC
<i>U6</i>	Forward: CTCGCTTCGGCAGCACA
	Reverse: AACGCTTCACGAATTTGCGT
<i>GAPDH</i>	Forward: ACCTGCCAAATATGATGACATC
	Reverse: GTATCCAGTGCAGGGTCC

GAPDH, glyceraldehyde-3-phosphate dehydrogenase; IL, interleukin; miR-183, microRNA-183;

Nav1.3, voltage-gated sodium 1.3; Nav1.7, voltage-gated sodium 1.7; Nav1.8, voltage-gated sodium 1.8; TGF α , transforming growth factor α ; TNF- α , tumour necrosis factor- α ; TRPV1, transient receptor potential vanilloid subtype-1.

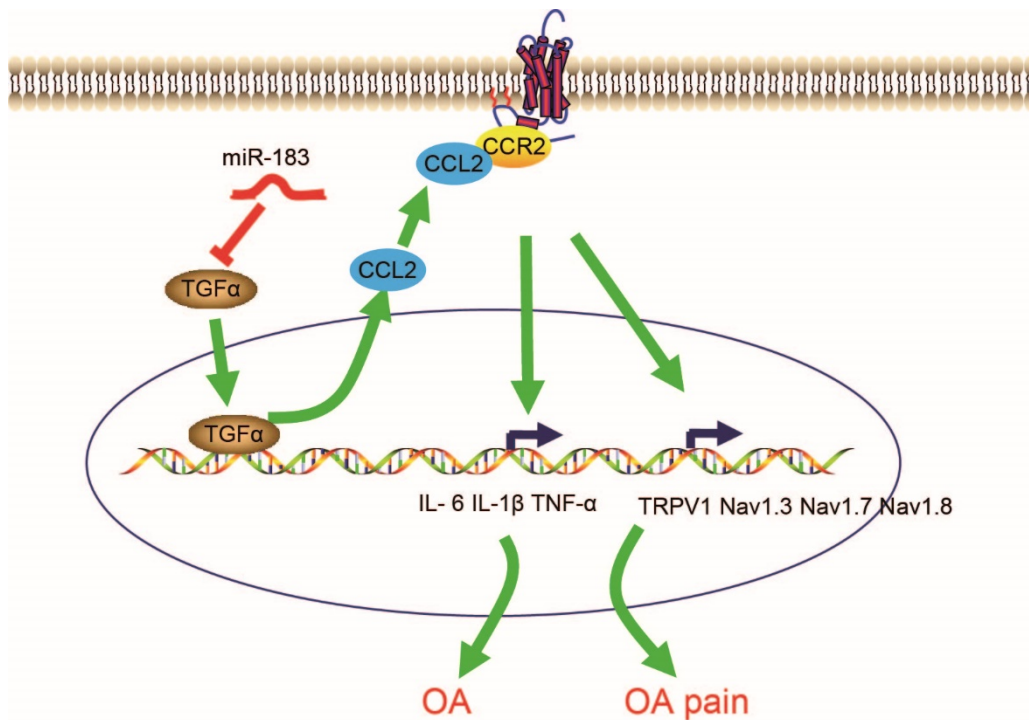


Fig. a. Mechanistic diagram illustrating how microRNA-183 (miR-183) ameliorates osteoarthritis (OA) pain by inhibiting the TGF α –CCL2/CCR2 signalling axis. CCL2, C-C motif chemokine ligand 2; CCR2, C-C chemokine receptor 2; IL, interleukin; Nav1.3, voltage-gated sodium 1.3; Nav1.7, voltage-gated sodium 1.7; Nav1.8, voltage-gated sodium 1.8; TGF α , transforming growth factor α ; TNF- α , tumour necrosis factor- α ; TRPV1, transient receptor potential vanilloid subtype-1.