

Target species	Sequence 5'-3'	Product size	Annealing	References
<i>All enterococcus</i>	FW: TACTGACAAACCATTTCATGATG RV: AACTTCGTCACCAACGCGAAC	112 bp	62°C	Clin et al., 1999
<i>Akkermansia sp.</i>	FW: CAGCACGTGAAGGTGGGGAC RV: CCTTGCGGTTGGCTTCAGAT	329 bp	59°C	Collado et al., 2007
<i>Barnesiella sp.</i>	FW: ACCTTACCCGGGCTCAAAC RV: CTGATGCGCGATTACTAGCGAA	383 bp	58°C	
<i>B. dorei</i>	FW: CTGCCGGCTACAAATTCTACA RV: AGGTTTGAGAAGATGTCGCTC	184 bp	63°C	Cinek et al., 2017
<i>B. fragilis</i>	FW: GGTAACGGCCCAACAGCCT RV: TGGCTGGTTCAGGCTAACGC	139 bp	62°C	
<i>B. thetaiotaomicron</i>	FW: AACCTTCCTTGCGGGTACAT RV: CGGTGCCTGCTGTGATAAGTA	207 bp	60°C	
<i>B. vulgatus</i>	FW: TGTGCATAGCCGTAATGGTG RV: GTAGCATCCGGCATCCATC	155 bp	63°C	Cinek et al., 2017
<i>Clostridium (ASF356)</i>	FW: CGGTGACTAATACCGCATAACGG RV: CCTTGCCGCTACTCTCCC	413 bp	56°C	
<i>E. coli</i>	FW: TGGGAAGCGAAAATCCTG RV: CAGTACAGGTAGACTTCTG	220 bp	62°C	Maheux et al., 2009
<i>E. faecalis</i>	FW: GCCACTATTTCTCGGACAGC RV: GTCGTCCCTTTGGCAAATAA	518 bp	62°C	Lui et al., 2005
<i>E. plexicaudatum (ASF492)</i>	FW: CTGCGGAATTCCTTCGGGG RV: CCCATACCACGGAGTTTTTC	167 bp	62°C	
<i>L. intestinalis (ASF360)</i>	FW: CTTCGGTGATGACGCTGG RV: GCAATAGCCATGCAGCTATTGTT G	131 bp	62°C	
<i>L. johnsonii</i>	FW: CTCAGGACGAACGCTGGCGG RV: GCAAGCACTAAAATCATCTAGGC AAGC	74 bp	62°C	
<i>L. murinus (ASF361)</i>	FW: GCAATGATGCGTAGCCGAAC RV: GCACTTTCTTCTAACAACAGG G	182 bp	63°C	
<i>L. reuteri</i>	FW: ACCGAGAACACCGCGTTATTT RV:	94 bp	61°C	

	CATAACTTAACCTAAACAATCAA AGATTGTCT			
<i>M. schaedleri</i> (ASF457)	FW: CCGAAAGGTGAGCTAATGCCGG RV: GGGACGCGAGTCCATCTTTC	95 bp	57°C	
<i>P. goldsteinii</i> (ASF519)	FW: CACAGTAAGCGGCACAGCG RV: CCGCTCACACGGTAGCTG	428 bp	60°C	Sarma- Rupavtarm et al., 2004
<i>Pseudoflavino factor sp.</i> (ASF500)	FW: GTCGCATGGCACTGGACATC RV: CCTCAGGTACCGTCACTTGCTTC	285 bp	58°C	

We designed primers except for the few obtained in the literature. No bifidobacteria were recovered using the various primers from our previous works

Table 1: Primers used to quantify ASF bacteria and selected bacteria with a potential role in autoimmune and inflammatory diseases.

Treatment	water	Lpps	<i>p</i>
Osteoarthritis	+	-	
Rats (n)	10	8	
Distal Ileum			
<i>Ligilactobacillus murinus</i>	5.37 ± 1.5*	7.52 ± 0.6	0.048
<i>Limosilactobacillus reuteri</i>	4.87 ± 0.9	5.96 ± 0.5	0.033
Caecum			
<i>Lactobacillus johnsonii</i>	6.19 ± 1.2	7.97 ± 0.5	0.02
<i>Parabacteroides goldsteinii</i>	8.42 ± 0.6	7.37 ± 0.5	0.021
Colon			
<i>L. johnsonii</i>	5.85 ± 1.5	7.90 ± 0.2	0.008
<i>L. reuteri</i>	5.39 ± 1.5	7.13 ± 0.3	0.023

<i>Mucispirillum schaedleri</i>	5.88 ± 0.7	6.87 ± 0.4	0.046
<i>Akkermansia sp.</i>	7.41 ± 0.7	6.17 ± 0.5	0.01

*cfu/g intestin

Table 2: Significant variation to intestinal bacteria counts following Lpps intake in MIA-induced OA rats.