

Influence of inflammasome pathway activation in macrophages on the matrix metalloproteinase expression of human hepatic stellate cells

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Stress responses in fishes: from molecular to evolutionary processes

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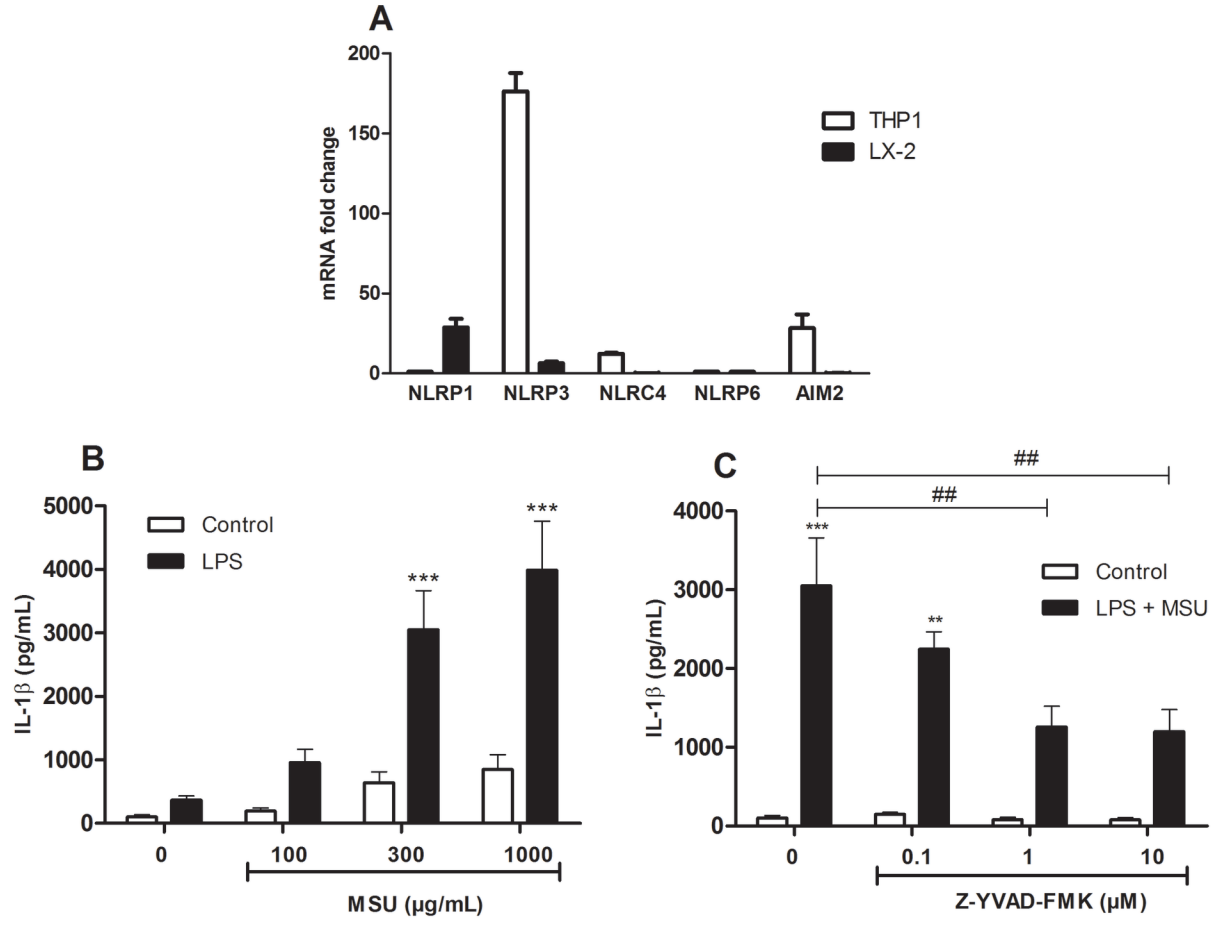
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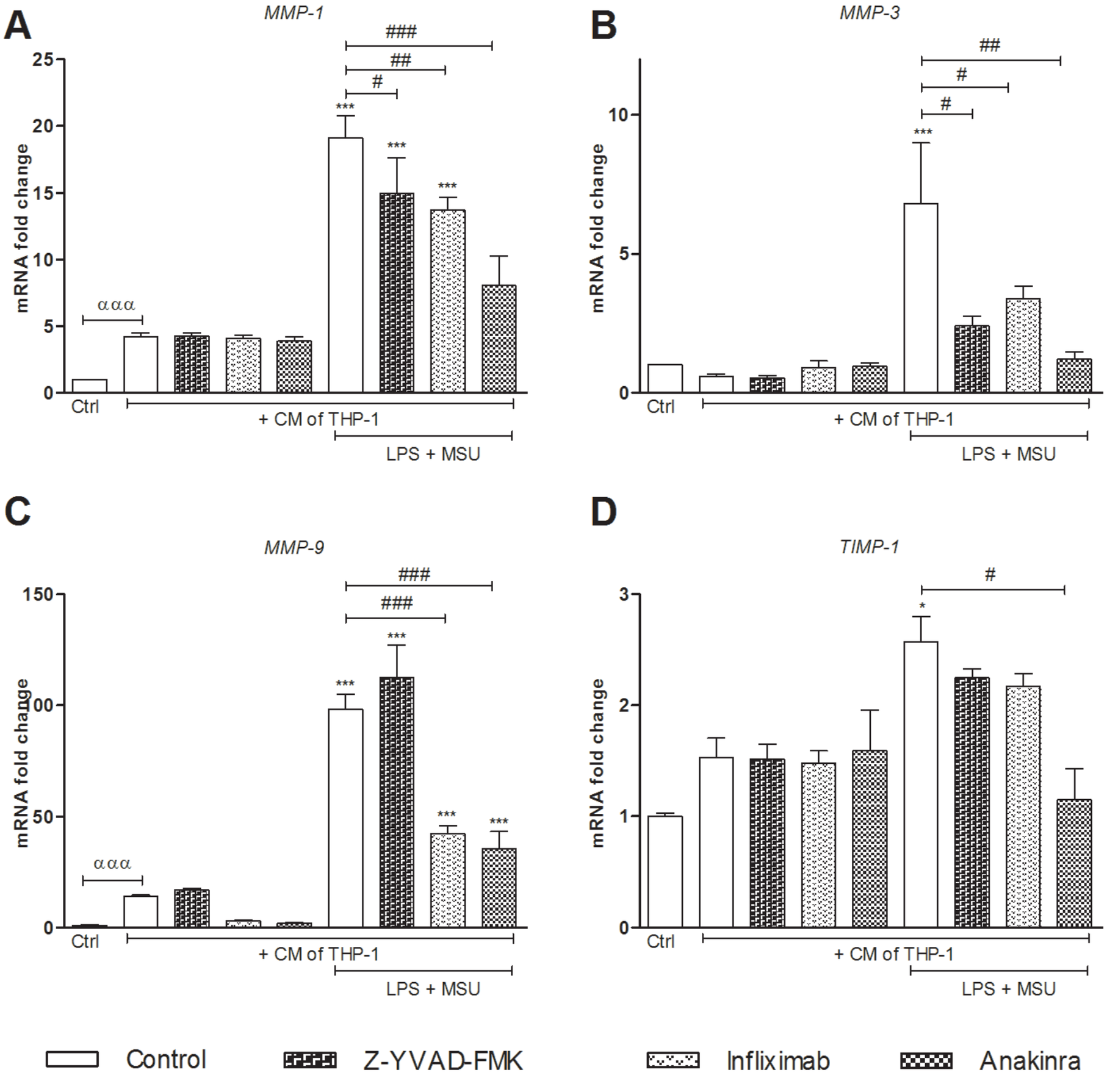
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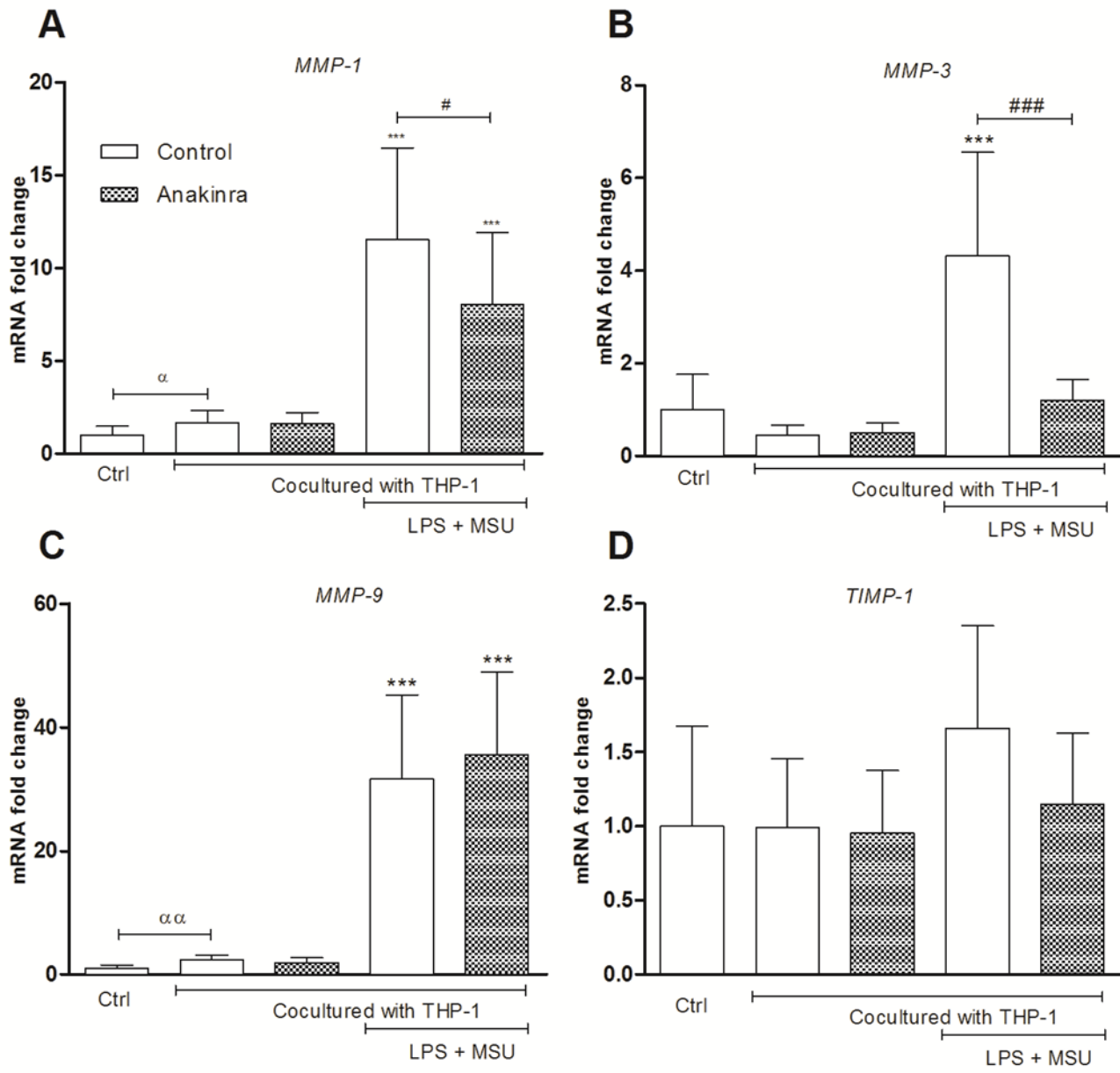
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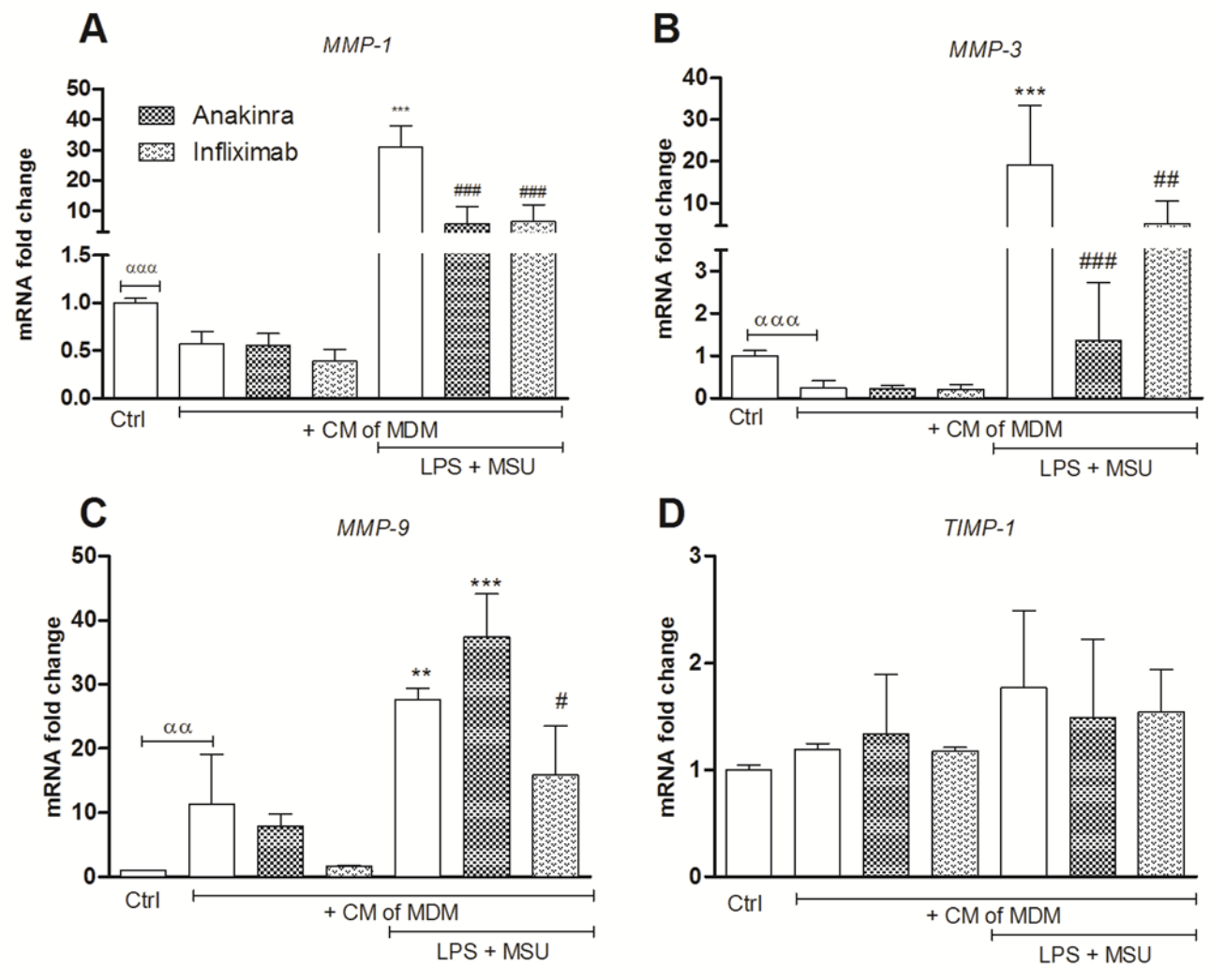
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A
mRNA fold change
200
150
100
50
0
THP1
LX-2
NLRP1
NLRP3
NLRC4
NLRP6
AIM2
B
IL-1β (pg/mL)
5000
4000
3000
2000
1000
0
Control
LPS
***
***
0
100
300
1000
MSU (μg/mL)
C
IL-1β (pg/mL)
4000
3000
2000
1000
0
##
##
***
**
Control
LPS + MSU
0
0.1
1
10
Z-YVAD-FMK (μM)


A
MMP-1
mRNA fold change
25
20
15
10
5
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###
##
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ααα
Ctrl
+ CM of THP-1
LPS + MSU
B
MMP-3
mRNA fold change
10
5
0
##
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#
***
Ctrl
+ CM of THP-1
LPS + MSU
C
MMP-9
mRNA fold change
150
100
50
0
###
###
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***
***
ααα
Ctrl
+ CM of THP-1
LPS + MSU
D
TIMP-1
mRNA fold change
3
2
1
0
#
*
Ctrl
+ CM of THP-1
LPS + MSU
Control
Z-YVAD-FMK
Infliximab
Anakinra


A
MMP-1
mRNA fold change
20
15
10
5
0
Control
Anakinra
α
#
***
***
Ctrl
Cocultured with THP-1
LPS + MSU
B
MMP-3
mRNA fold change
8
6
4
2
0
###
***
Ctrl
Cocultured with THP-1
LPS + MSU
C
MMP-9
mRNA fold change
60
40
20
0
αα
***
***
Ctrl
Cocultured with THP-1
LPS + MSU
D
TIMP-1
mRNA fold change
2.5
2.0
1.5
1.0
0.5
0.0
Ctrl
Cocultured with THP-1
LPS + MSU


A
MMP-1
Anakinra
Infliximab
mRNA fold change
Ctrl
+ CM of MDM
LPS + MSU
B
MMP-3
C
MMP-9
D
TIMP-1

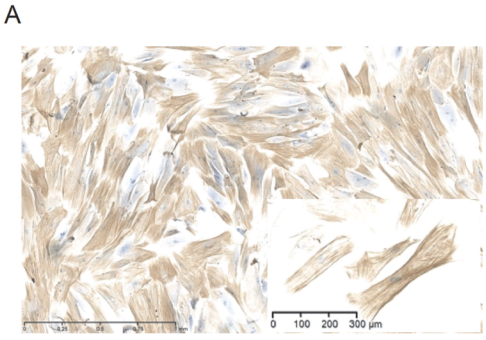

A
0 100 200 300 µm
B
MMP-3
mRNA fold change
10
8
6
4
2
0
###
***
**
LPS + MSU
C
MMP-9
mRNA fold change
8
6
4
2
0
***
***
LPS + MSU
D
COL1A1
mRNA fold change
1.5
1.0
0.5
0.0
###
***
*
LPS + MSU
E
ACTA2
mRNA fold change
1.5
1.0
0.5
0.0
###
***
***
LPS + MSU
Anakinra 1 µg/mL

Table 1 - **Primers used in this study for real-time PCR assay.**

Human Gene name	**Forward sequences 5' -> 3'**	**Reverse sequences 5' -> 3'**
GAPDH	ATGACATCAAGAAGGTGGTG	CATACCAGGAAATGAGCTTG
NLRP1	GGACTGACGATGACTTCTGG	ATCACAAAGCAGAGACCCG
NLRP3	GTGTTTCGAATCCCACTGTG	TCTGCTTCTCACGTACTTTCTG
NLRC4	CAGTCCCCTCACCATAGAAG	TCAAGTTACCCAAGCTGTCAG
NLRP6	TCTTCATCCACTCTTTCAGGC	CTCAGAAAGGTCTCGGCAG
AIM2	TGAAACCCCGAAGATCAACAC	CCCAGTACTTCCATTTTCCCAG
MMP3	GACAAAGGATACAACAGGGAC	TGAGTGAGTGATAGAGTGGG
MMP9	CGAACTTTGACAGCGACAAG	CACTGAGGAATGATCTAAGCCC
COL1A1	CCGGCTCCTGCTCCTCTTAGCG	CGTTCTGTACGCAGGTGATTGGTGG
ACTA2	CATCCTCATCCTCCCTTGAG	ATGAAGGATGGCTGGAACAG