FIGURE 1

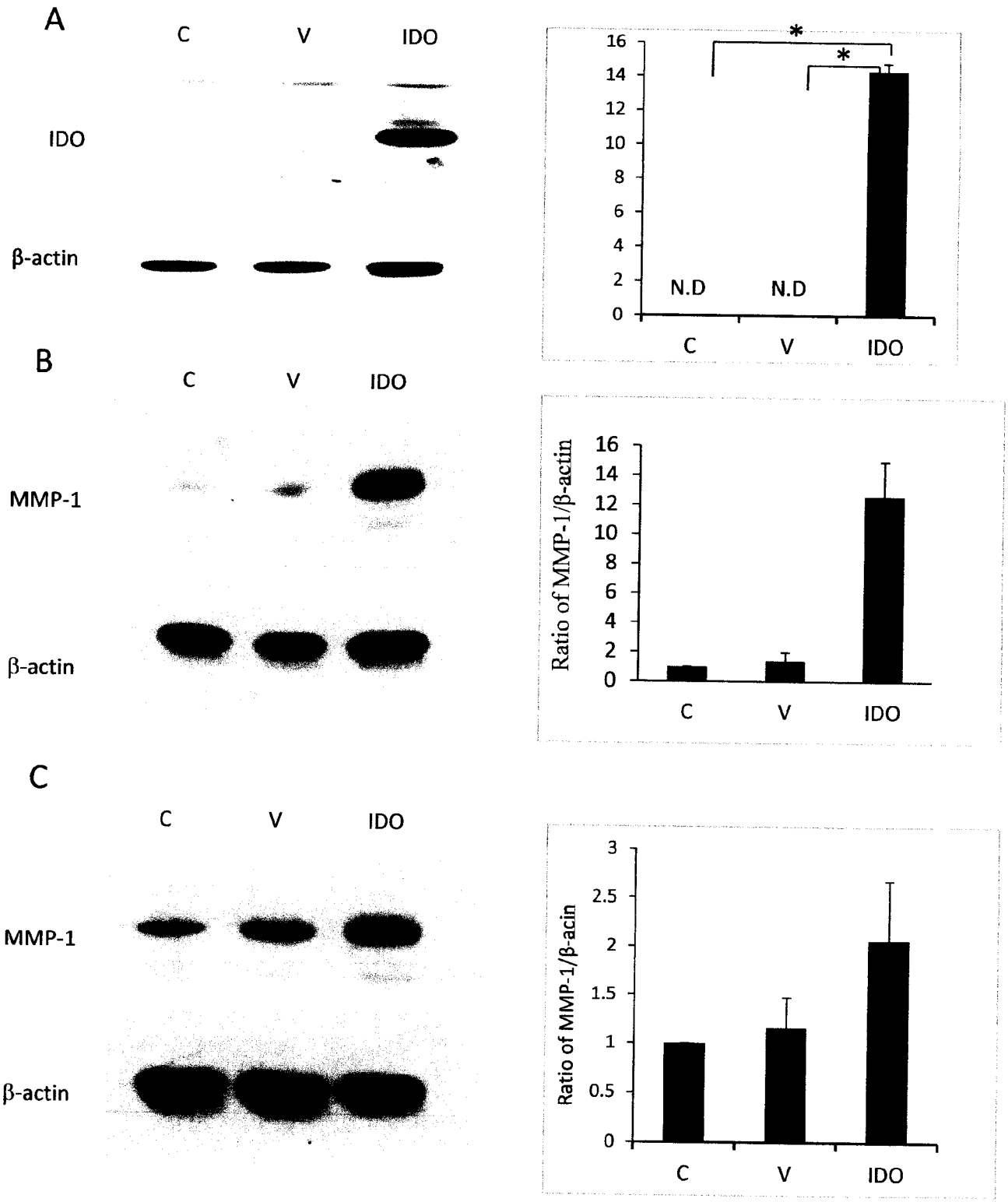
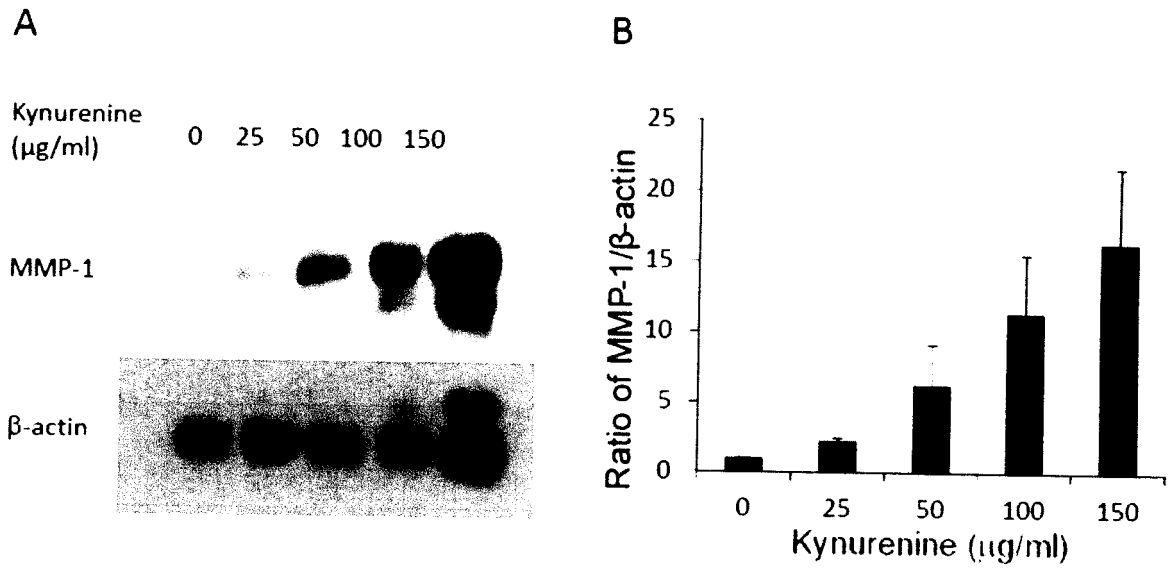

A
C
V
IDO
IDO
β-actin
16
14
12
10
8
6
4
2
0
N.D
N.D
C
V
IDO
B
C
V
IDO
MMP-1
β-actin
Ratio of MMP-1/β-actin
16
14
12
10
8
6
4
2
0
C
V
IDO
C
C
V
IDO
MMP-1
β-actin
Ratio of MMP-1/β-acin
3
2.5
2
1.5
1
0.5
0
C
V
IDO

FIGURE 2


A
Kynurenine (μg/ml)
0 25 50 100 150
MMP-1
β-actin
B
Ratio of MMP-1/β-actin
25
20
15
10
5
0
0 25 50 100 150
Kynurenine (μg/ml)

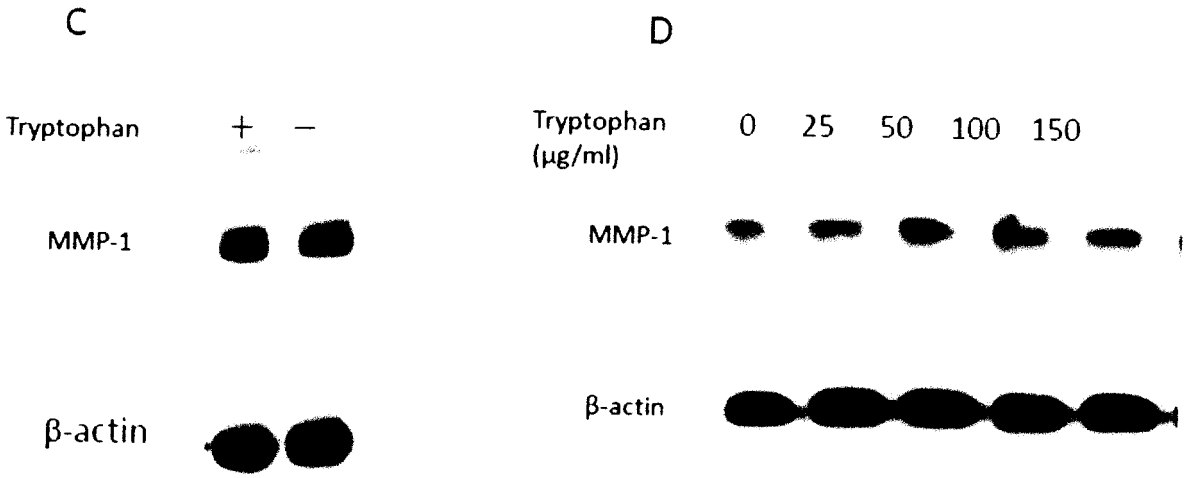
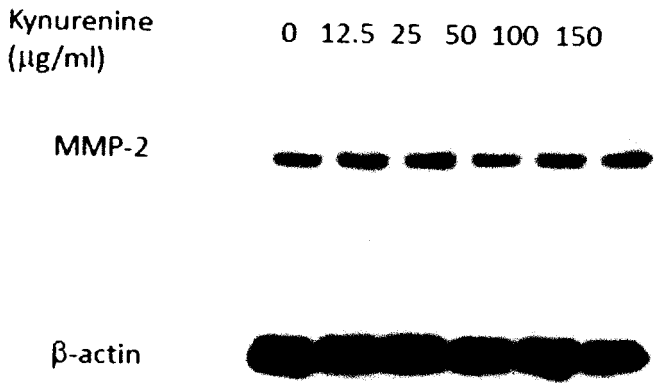
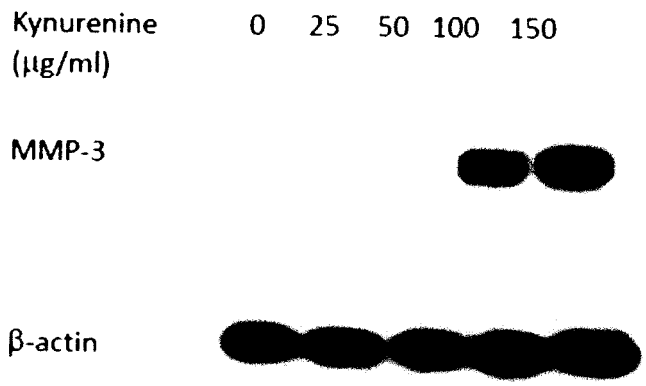

C
Tryptophan + −
MMP-1
β-actin
D
Tryptophan (μg/ml)
0 25 50 100 150
MMP-1
β-actin

FIGURE 3

A


Kynurenine (μg/ml)
0 12.5 25 50 100 150
MMP-2
β-actin

B


Kynurenine (μg/ml)
0 25 50 100 150
MMP-3
β-actin

C

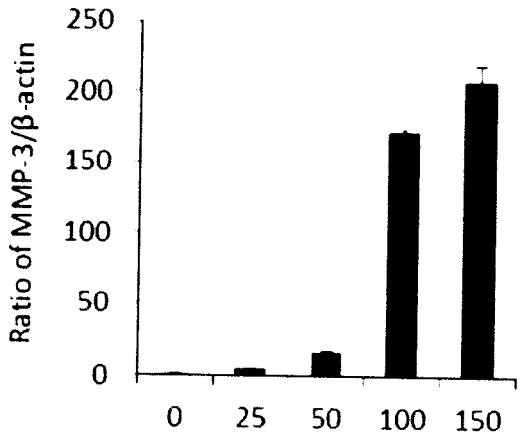

Ratio of MMP-3/β-actin
250
200
150
100
50
0
0 25 50 100 150

FIGURE 4

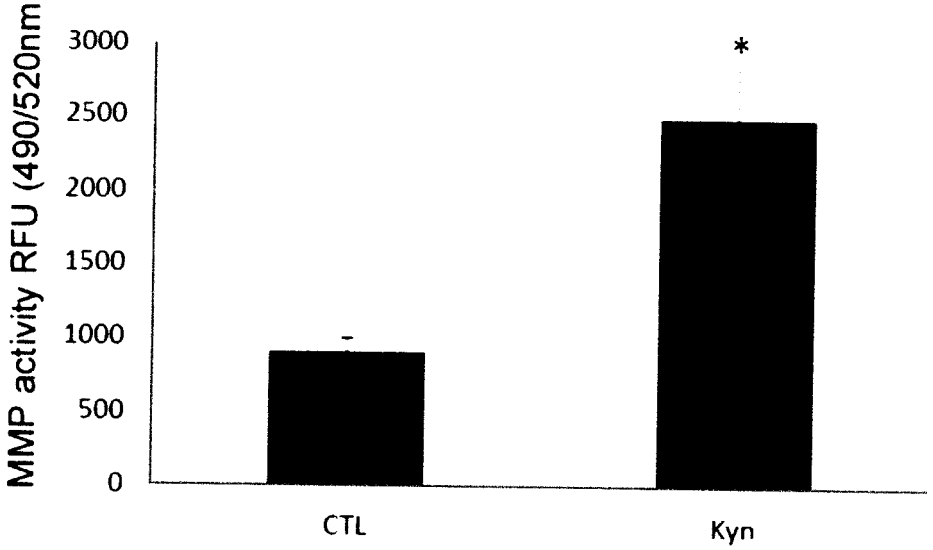
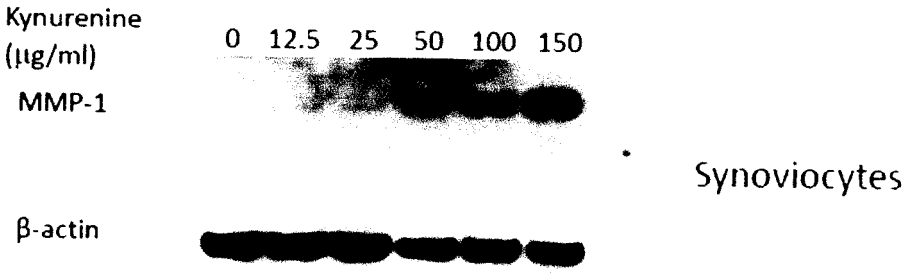


FIGURE 5

A



B

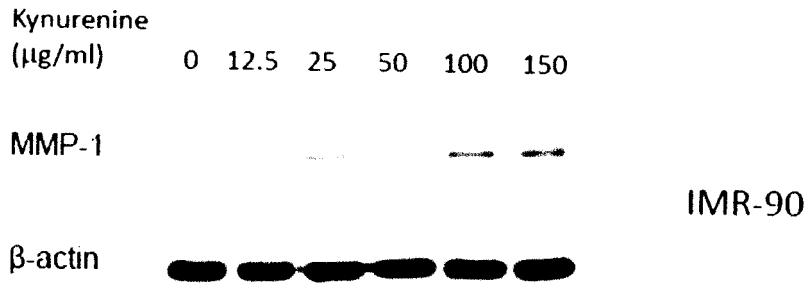


FIGURE 6

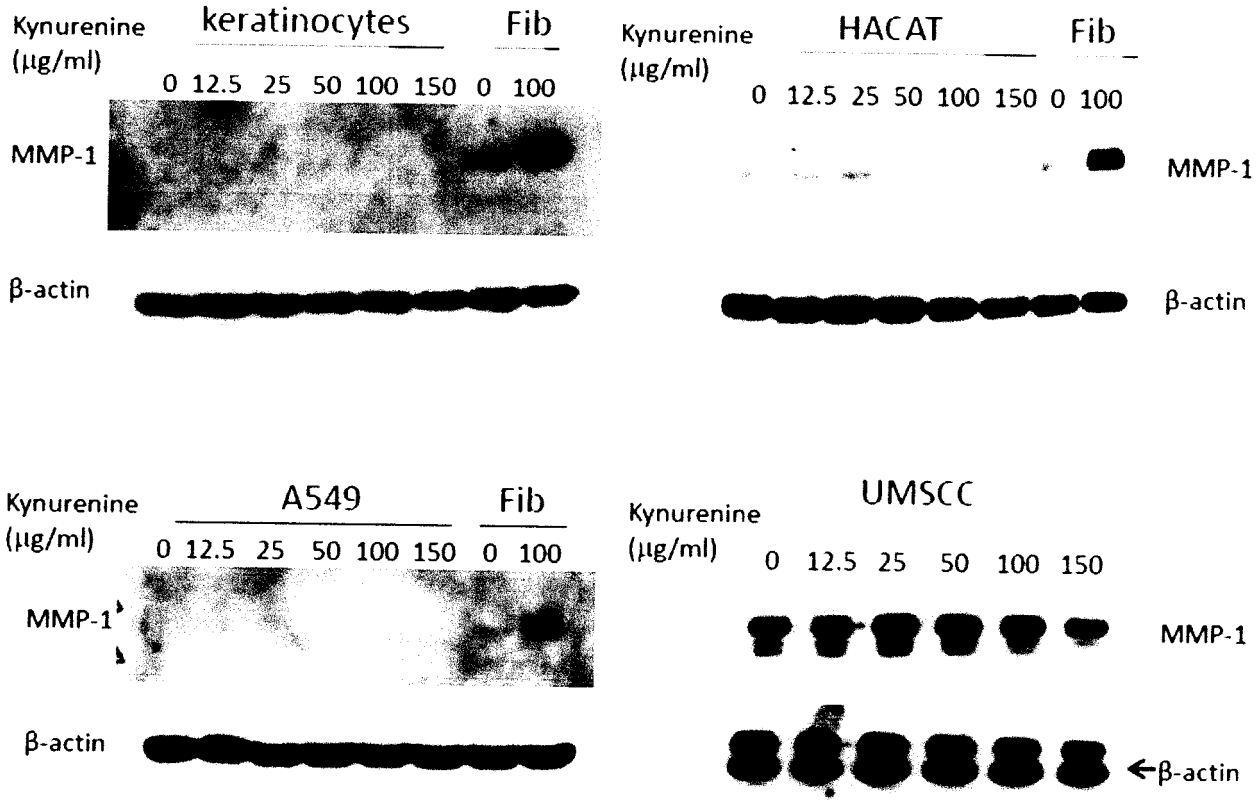

Kynurenine (µg/ml)
keratinocytes
Fib
0 12.5 25 50 100 150 0 100
MMP-1
β-actin
Kynurenine (µg/ml)
HACAT
Fib
0 12.5 25 50 100 150 0 100
MMP-1
β-actin
Kynurenine (µg/ml)
A549
Fib
0 12.5 25 50 100 150 0 100
MMP-1
β-actin
Kynurenine (µg/ml)
UMSCC
0 12.5 25 50 100 150
MMP-1
β-actin

FIGURE 7

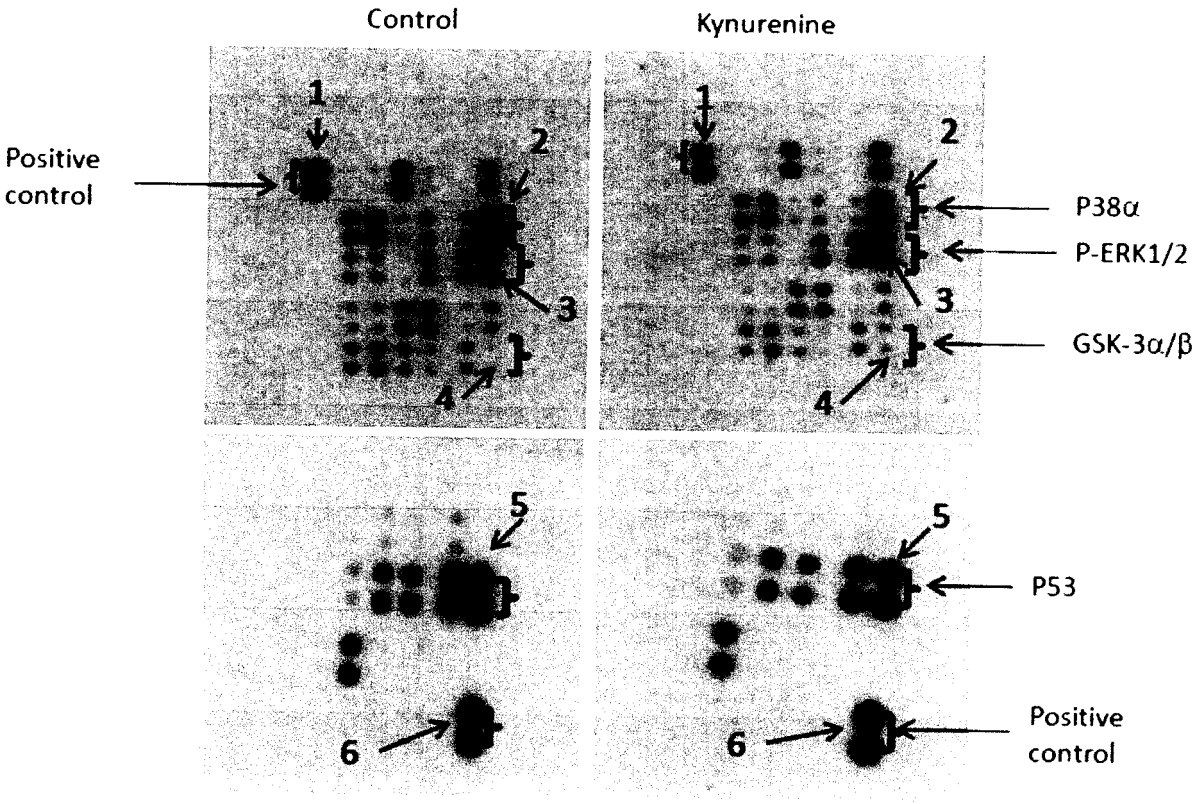

Control
Kynurenine
Positive control
1
2
3
4
P38α
P-ERK1/2
GSK-3α/β
5
P53
6
Positive control

FIGURE 8

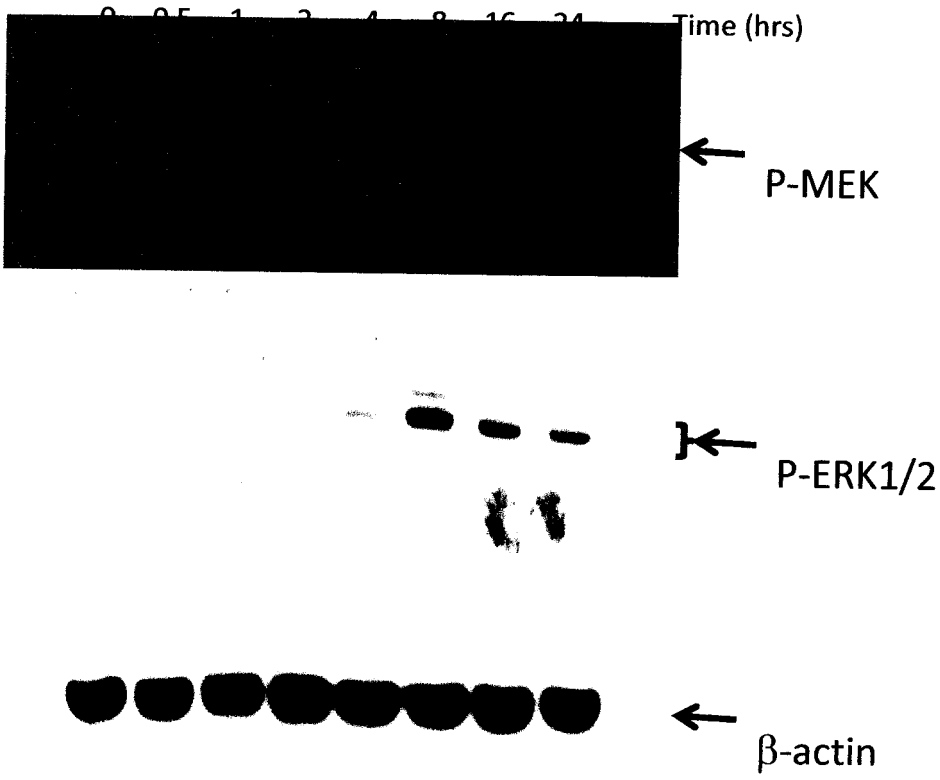


FIGURE 9

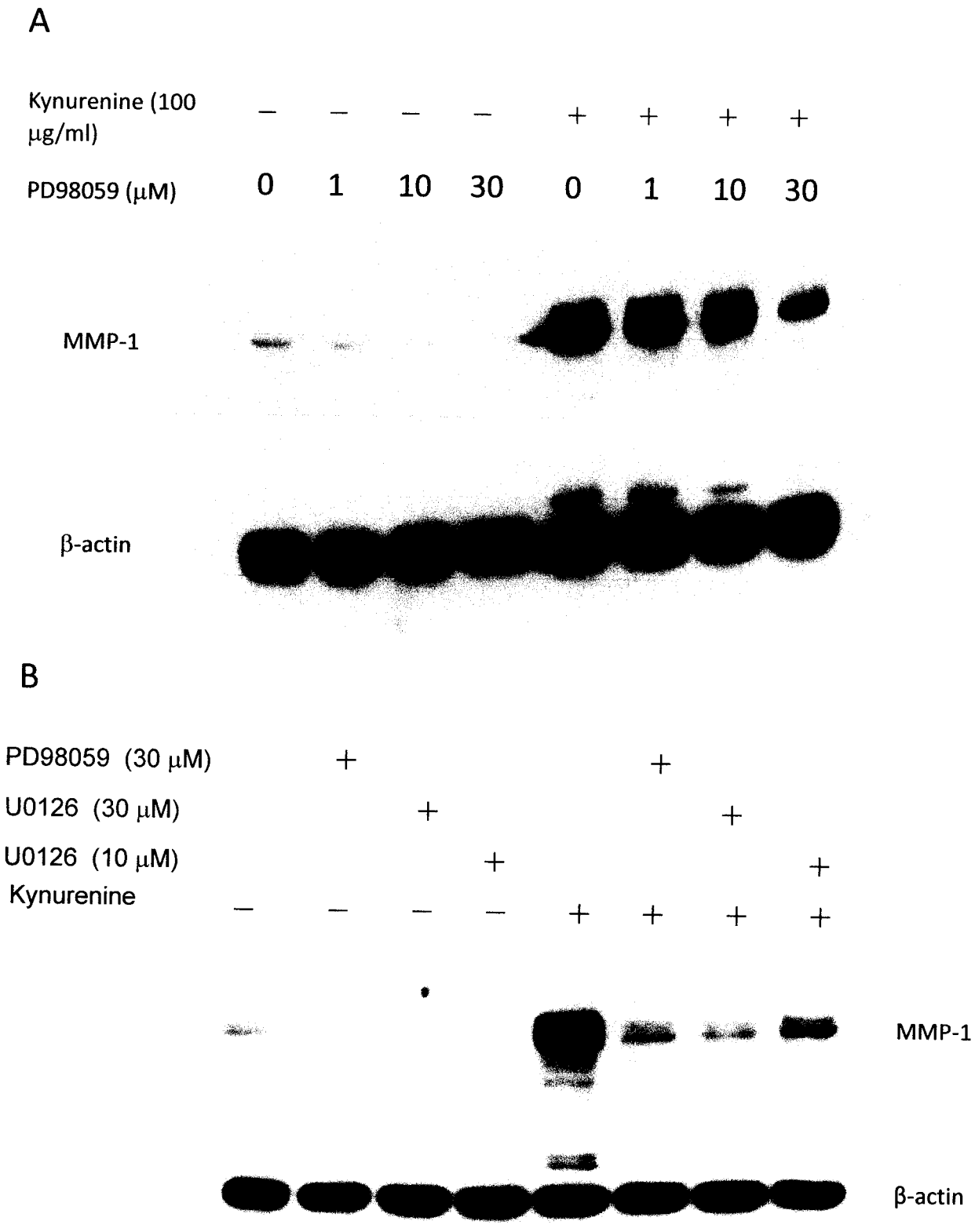

A
Kynurenine (100 μg/ml)
– – – – + + + +
PD98059 (μM)
0 1 10 30 0 1 10 30
MMP-1
β-actin
B
PD98059 (30 μM)
U0126 (30 μM)
U0126 (10 μM)
Kynurenine
– – – – + + + +
MMP-1
β-actin

FIGURE 10

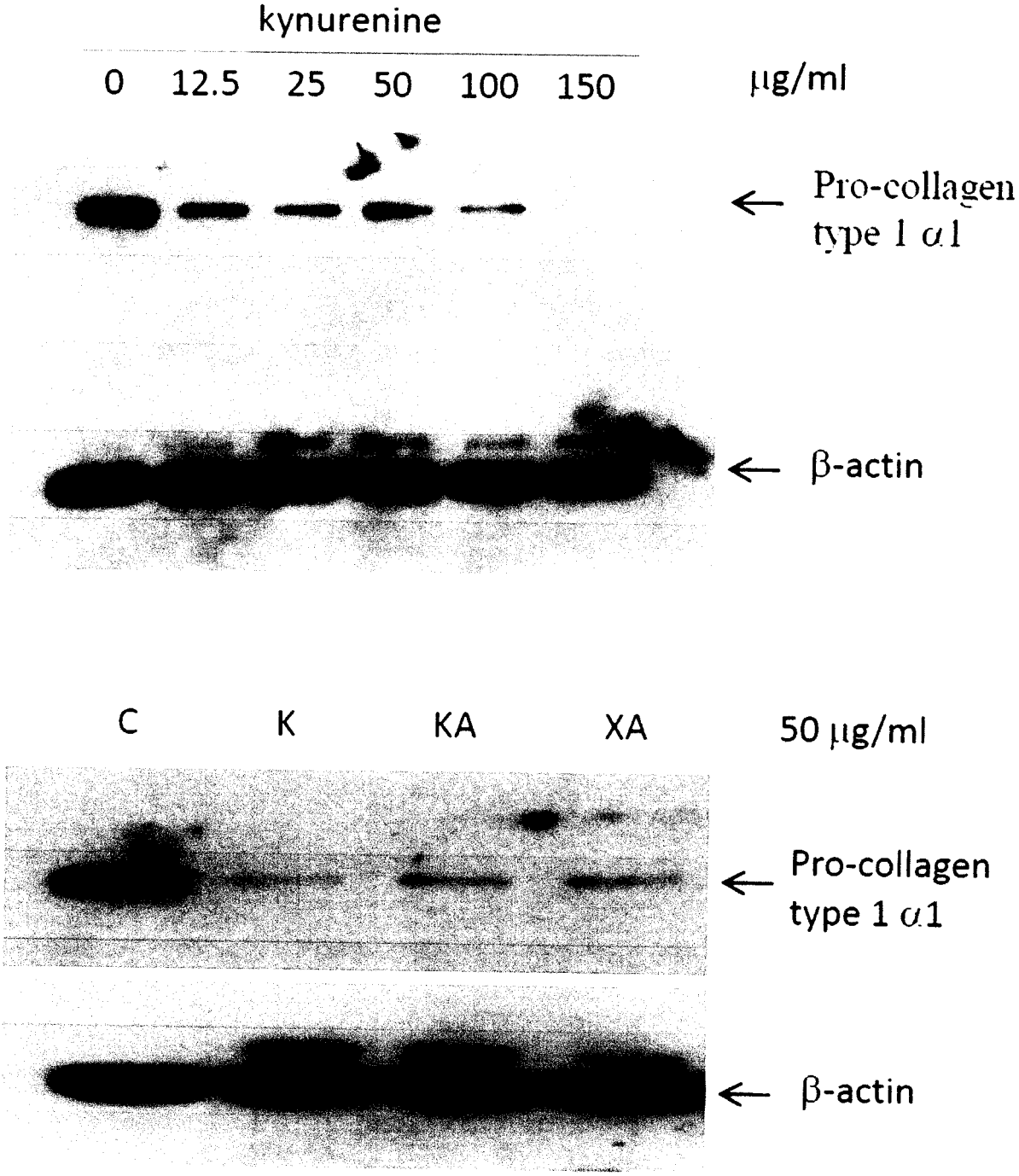

kynurenine
0 12.5 25 50 100 150
µg/ml
Pro-collagen type 1 α1
β-actin
C K KA XA
50 µg/ml
Pro-collagen type 1 α1
β-actin

FIGURE 11

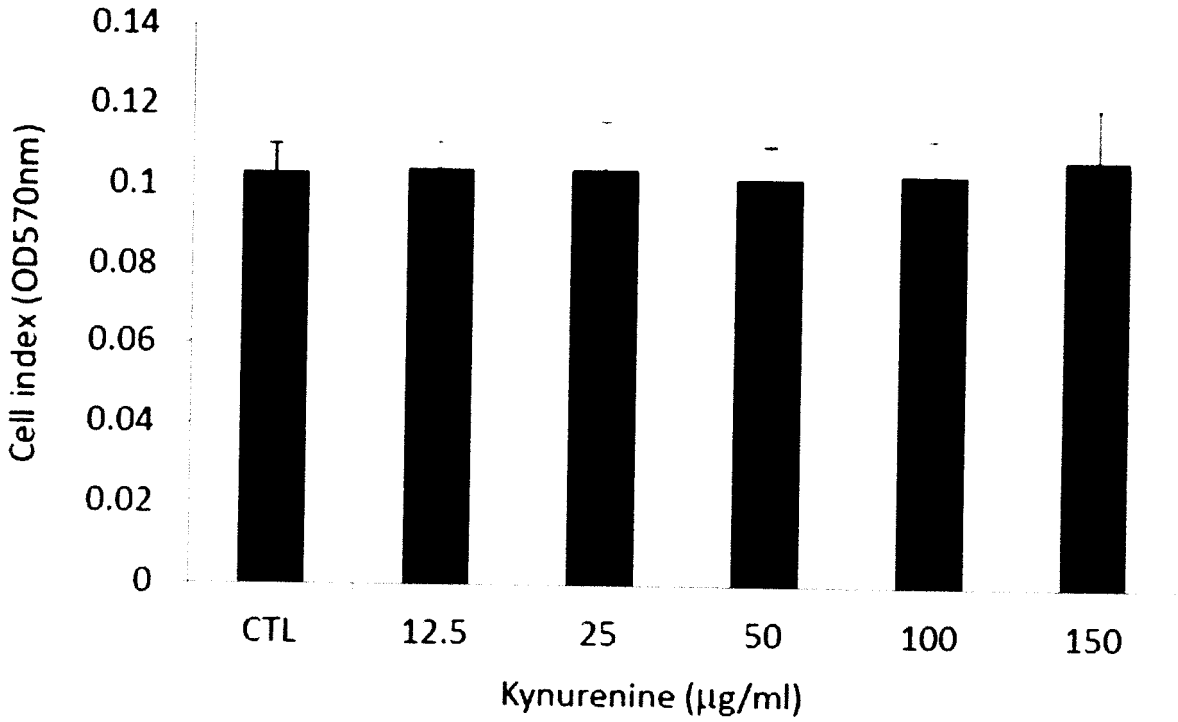
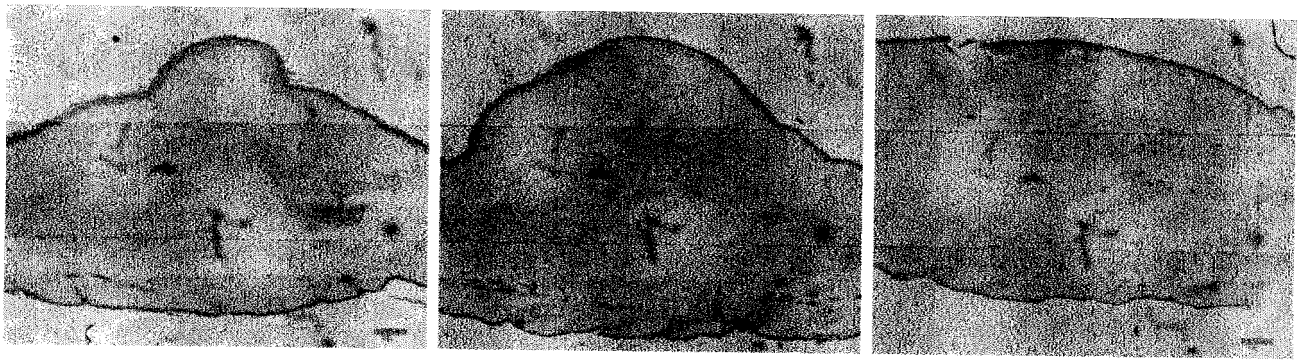

0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Cell index (OD570nm)
CTL
12.5
25
50
100
150
Kynurenine (µg/ml)

FIGURE 12

A



B

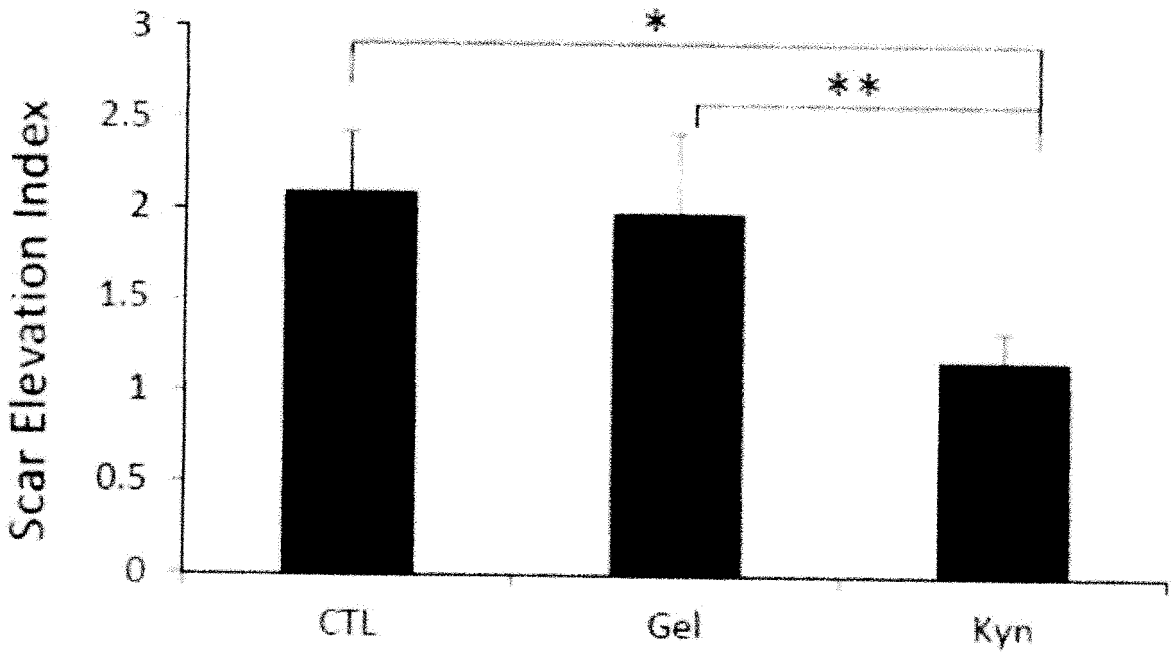
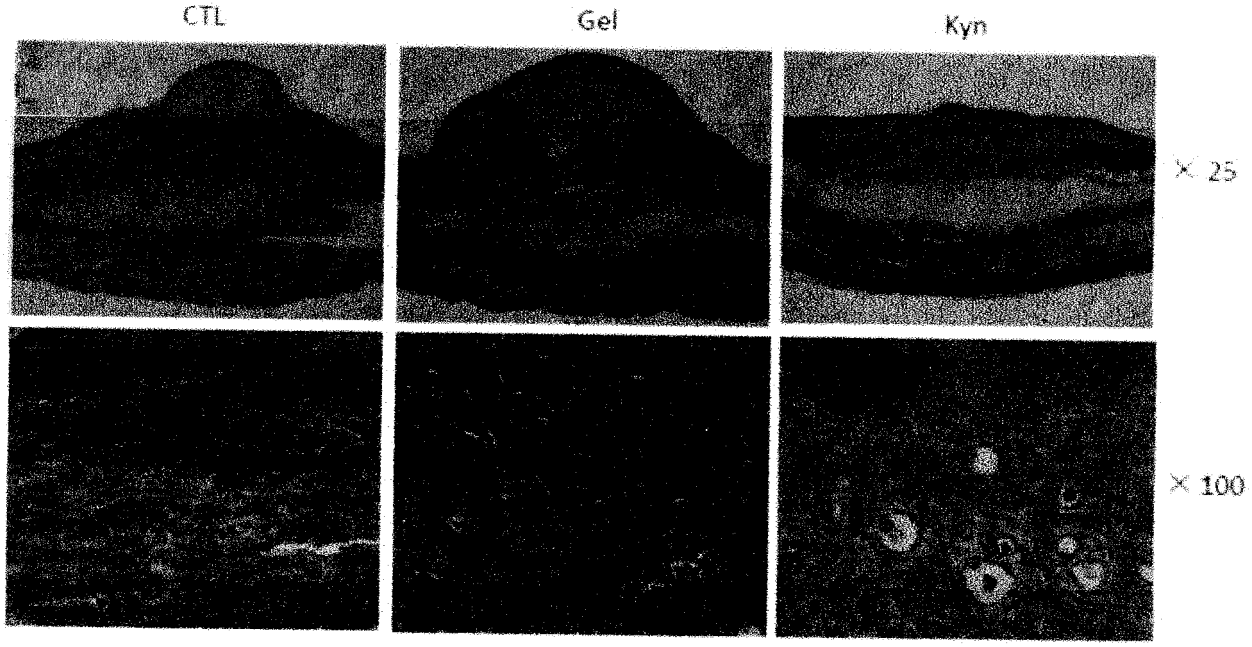


FIGURE 12 (continued)

C



D

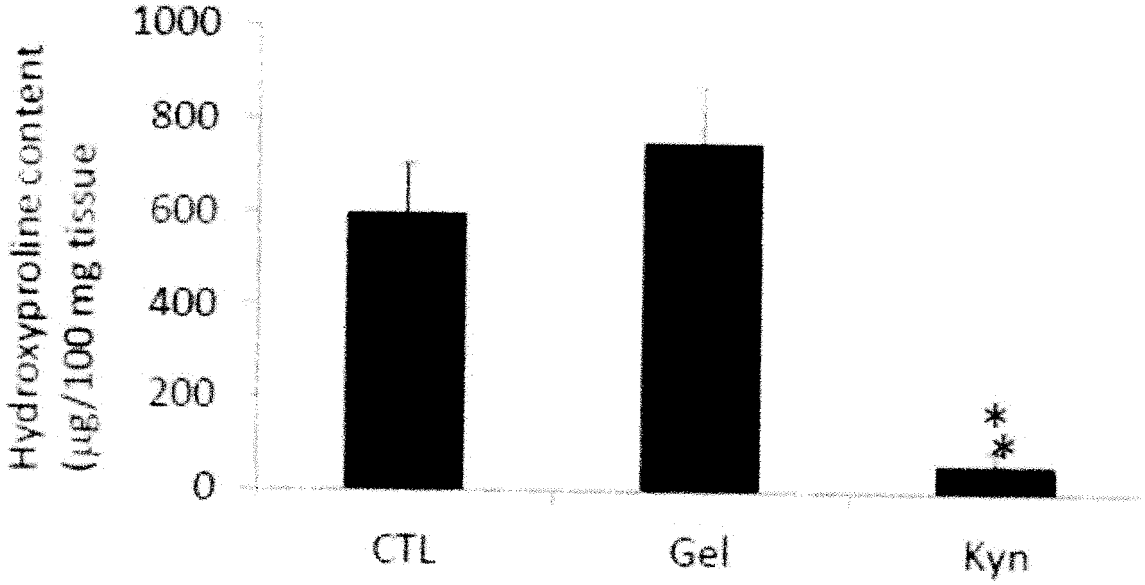


FIGURE 13

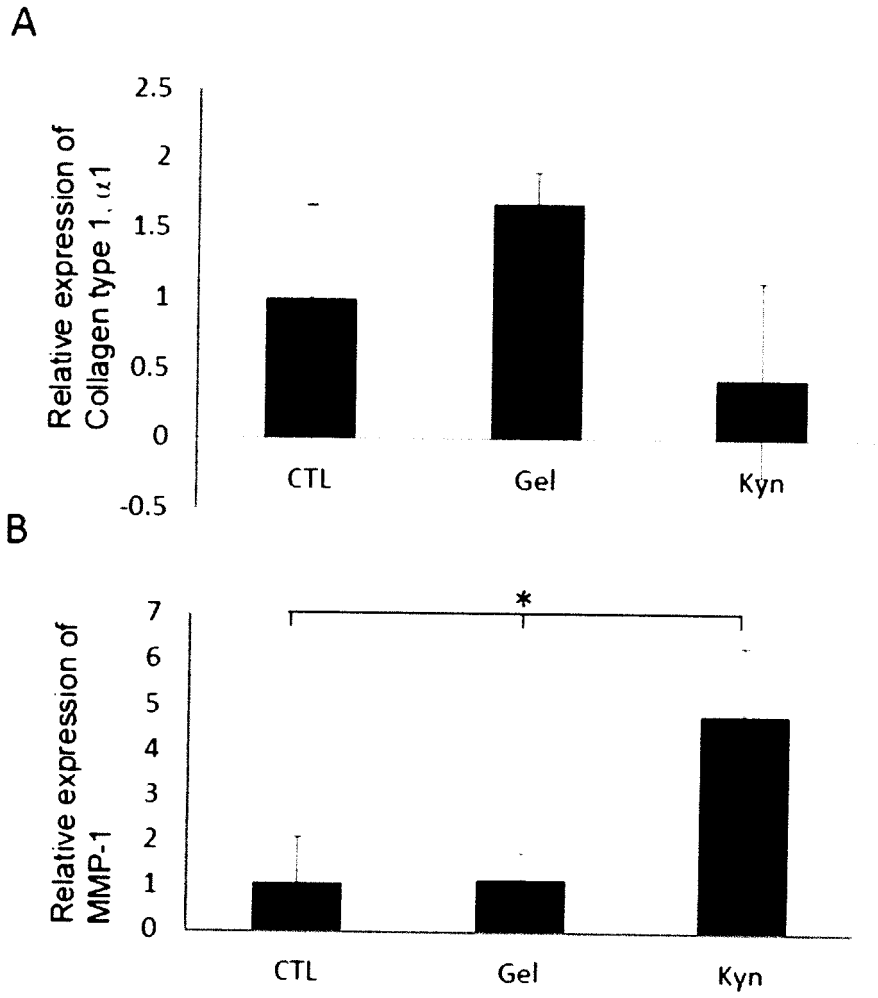


FIGURE 14

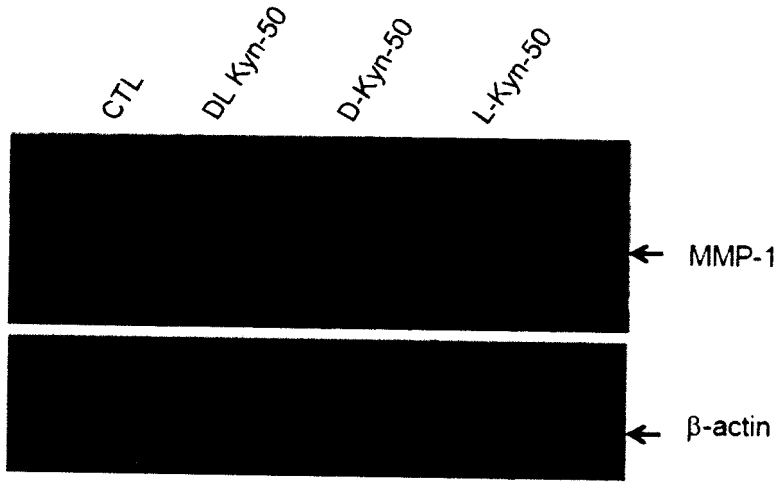


FIGURE 15

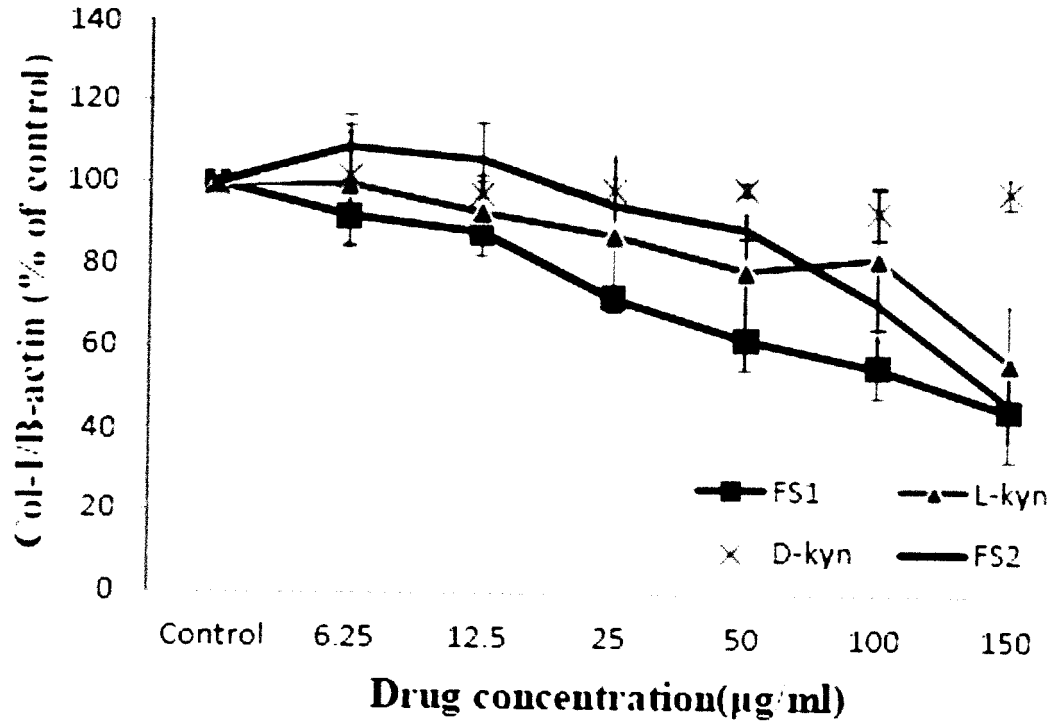


FIGURE 16

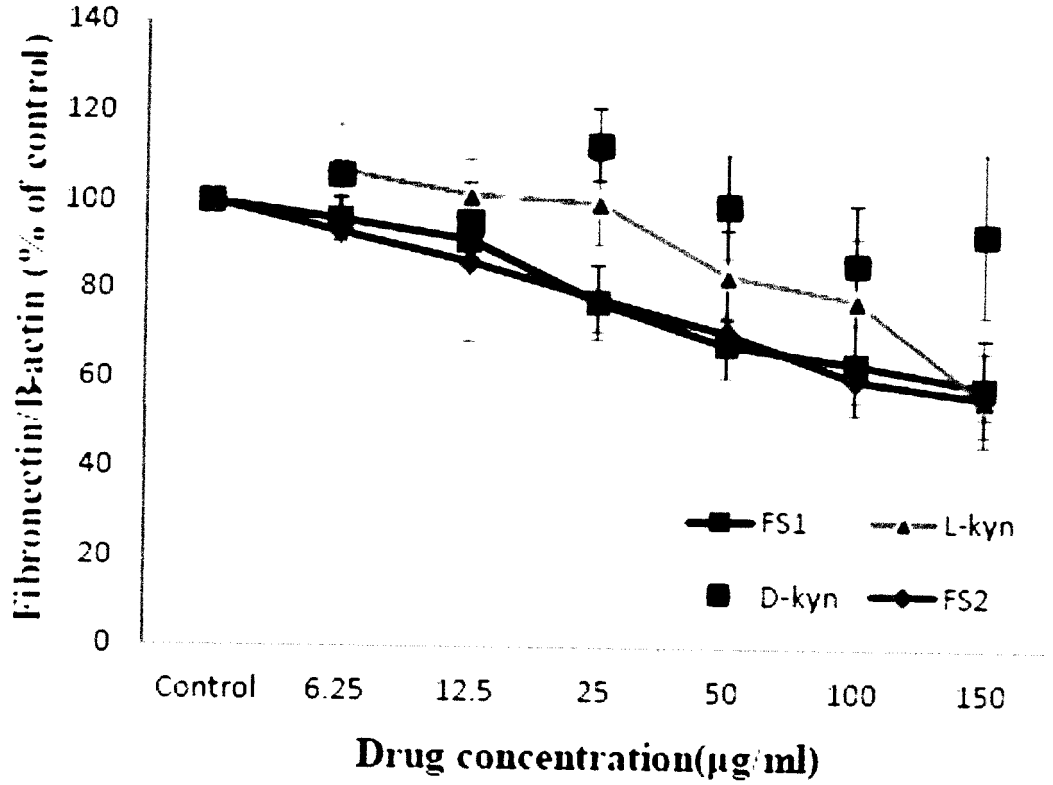
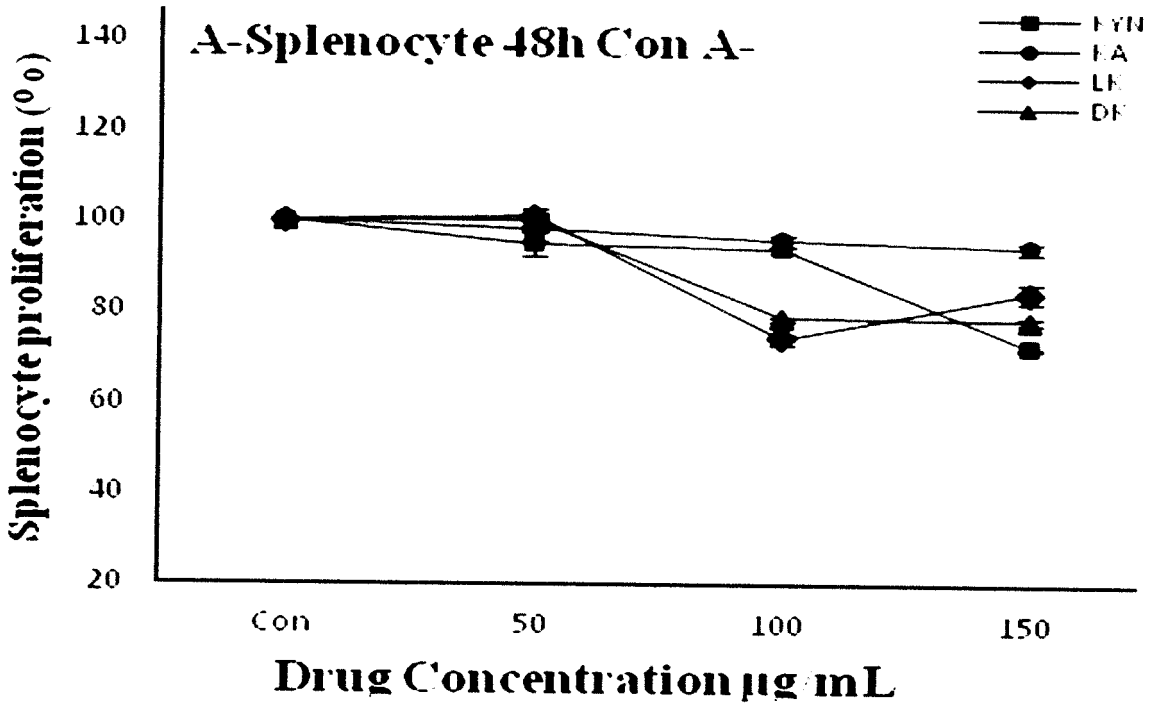


FIGURE 17


A-Splenocyte 48h Con A-
Splenocyte proliferation (%)
140
120
100
80
60
40
20
Con
50
100
150
Drug Concentration µg/mL

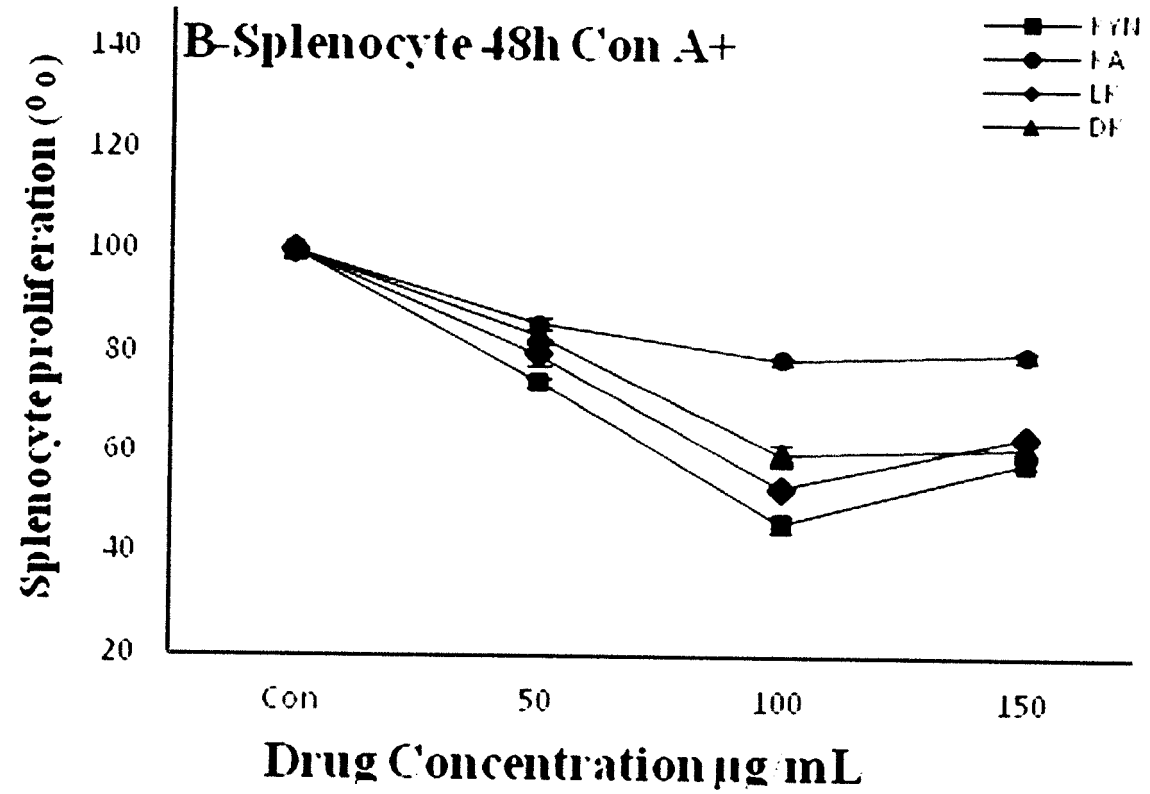
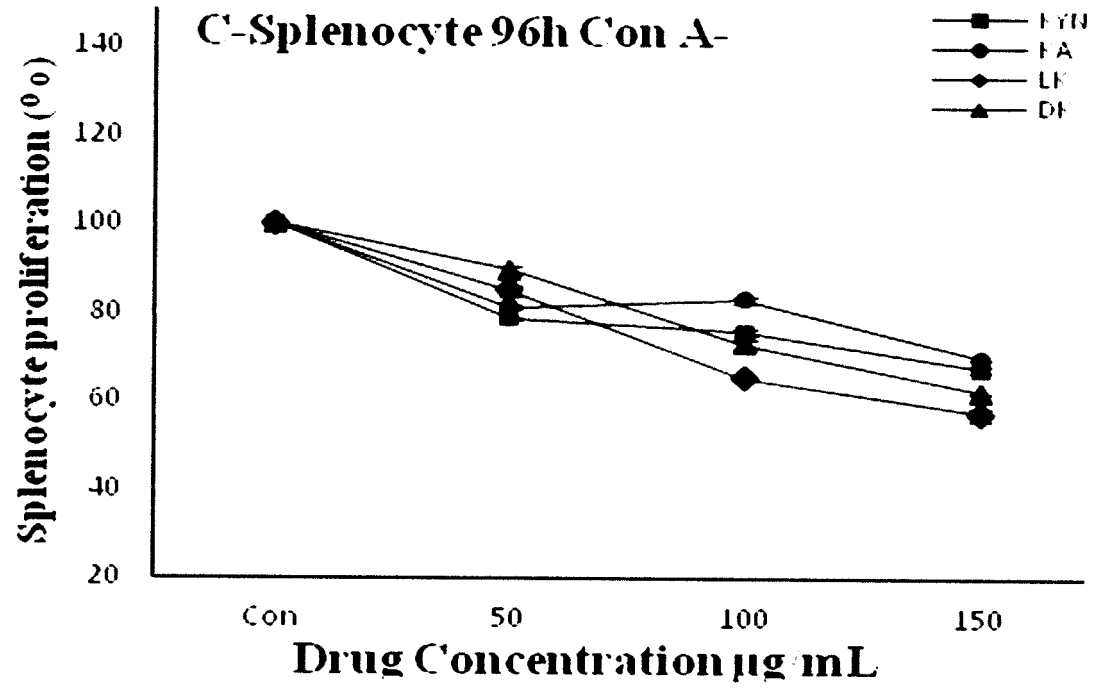

B-Splenocyte 48h Con A+
Splenocyte proliferation (%)
140
120
100
80
60
40
20
Con
50
100
150
Drug Concentration µg/mL

FIGURE 17 (continued)



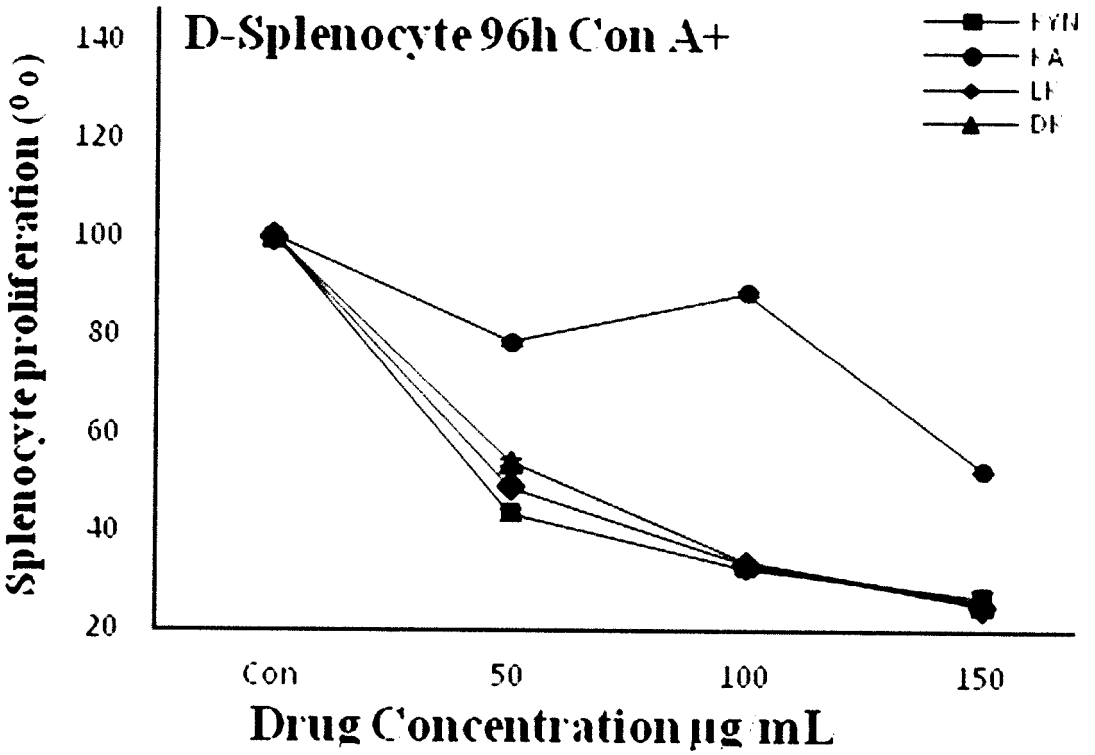
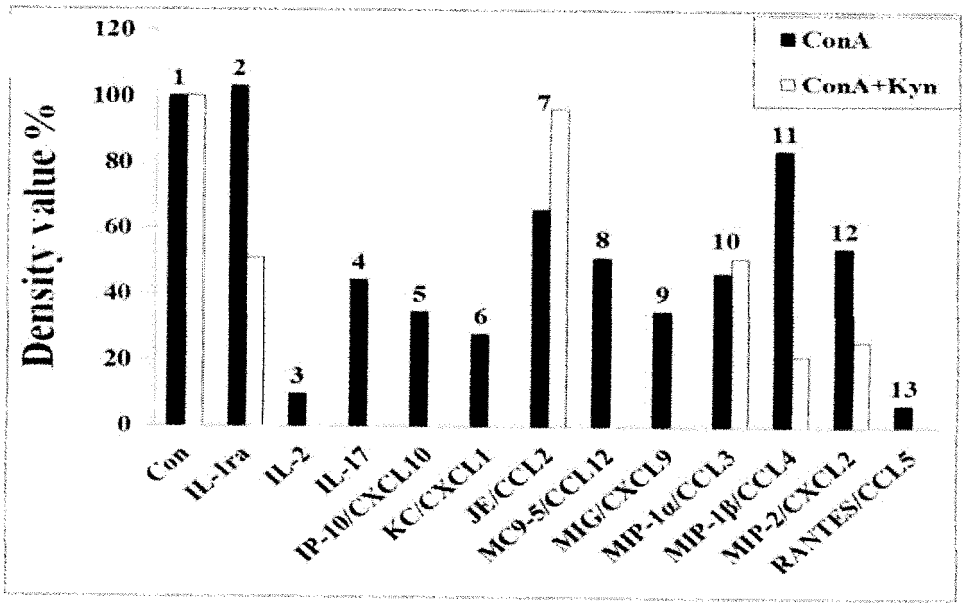
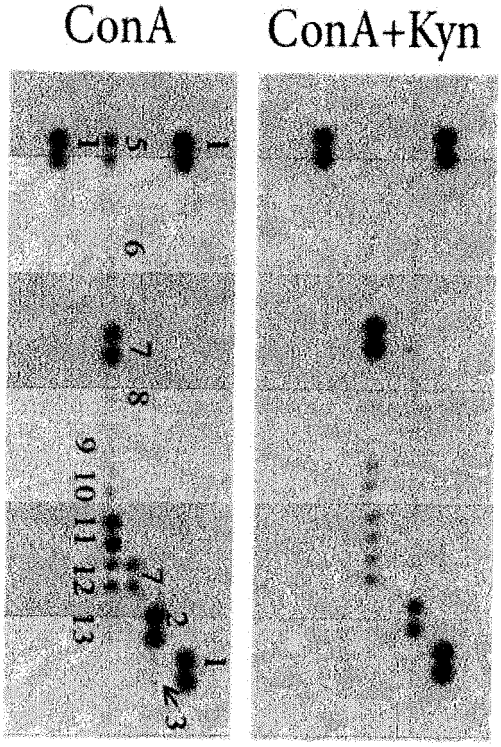


FIGURE 18

A



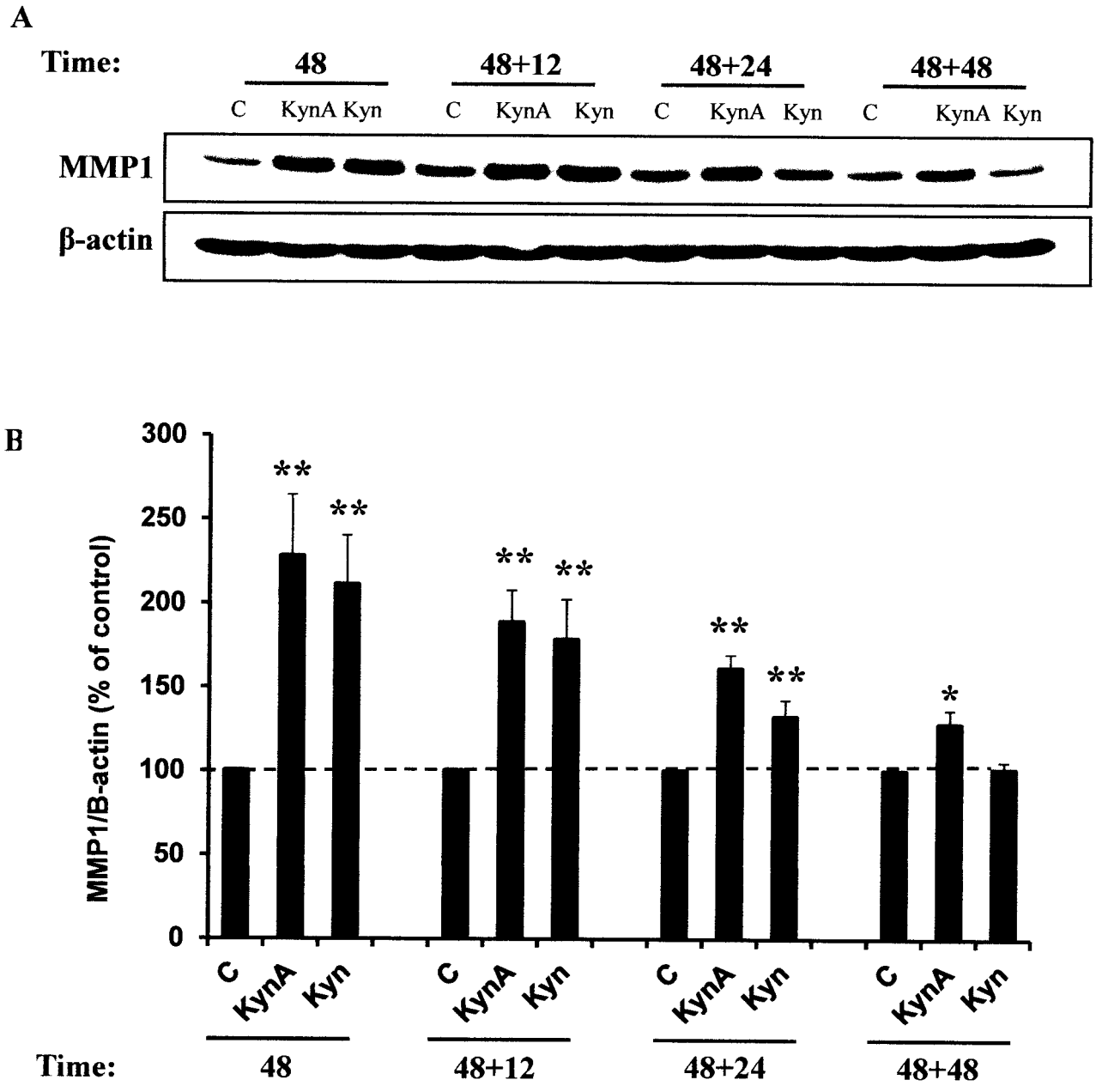
B



C

	F	E	D	C	B	A	
	Reference Spot	TARC CCL17	IP-10 CXCL10	IL-3	BLC CXCL13	Reference Spot	1
							2
		TIMP-1	I-TAC CXCL11	IL-4	C5/C5a		3
							4
		TNF-α	KC CXCL1	IL-5	G-CSF		5
							6
		TREM-1	M-CSF	IL-6	GM-CSF		7
							8
			JE CCL2	IL-7	I-309		9
							10
			MC9-5 CCL12	IL-10	Eotaxin CCL11		11
							12
			MIG CXCL9	IL-13	Sicam-1 CD54		13
							14
			MIP-1α CCL3	IL-12p70	IFN-γ		15
							16
			MIP-1β CCL4	IL-16	IL-1a		17
							18
			MIP-2 CXCL2	IL-17	IL-1β		19
							20
			RANTES CCL5	IL-23	IL-1ra		21
							22
	PBS (Negative Control)		SDF-1 CXCL12	IL-27	IL-2	Reference Spot	23
							24

FIGURE 19


A
Time:
48
48+12
48+24
48+48
C KynA Kyn C KynA Kyn C KynA Kyn C KynA Kyn
MMP1
β-actin
B
MMP1/B-actin (% of control)
300
250
200
150
100
50
0
**
**
**
**
**
**
*
C KynA Kyn C KynA Kyn C KynA Kyn C KynA Kyn
Time:
48
48+12
48+24
48+48