FIG.1

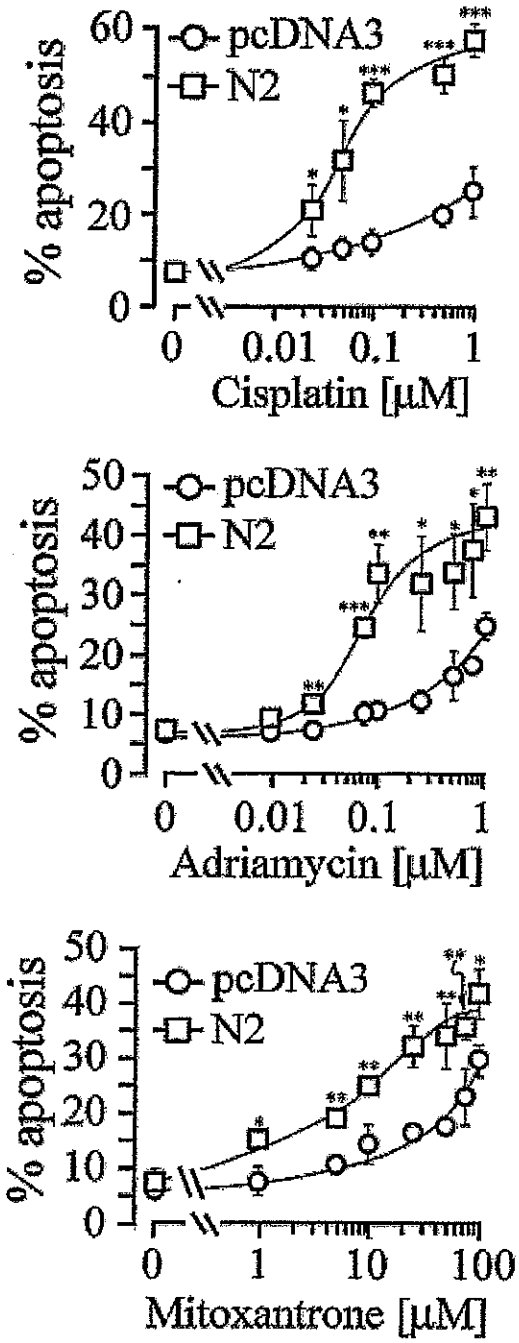

% apoptosis
pcDNA3
N2
Cisplatin [µM]
Adriamycin [µM]
Mitoxantrone [µM]

FIG.2

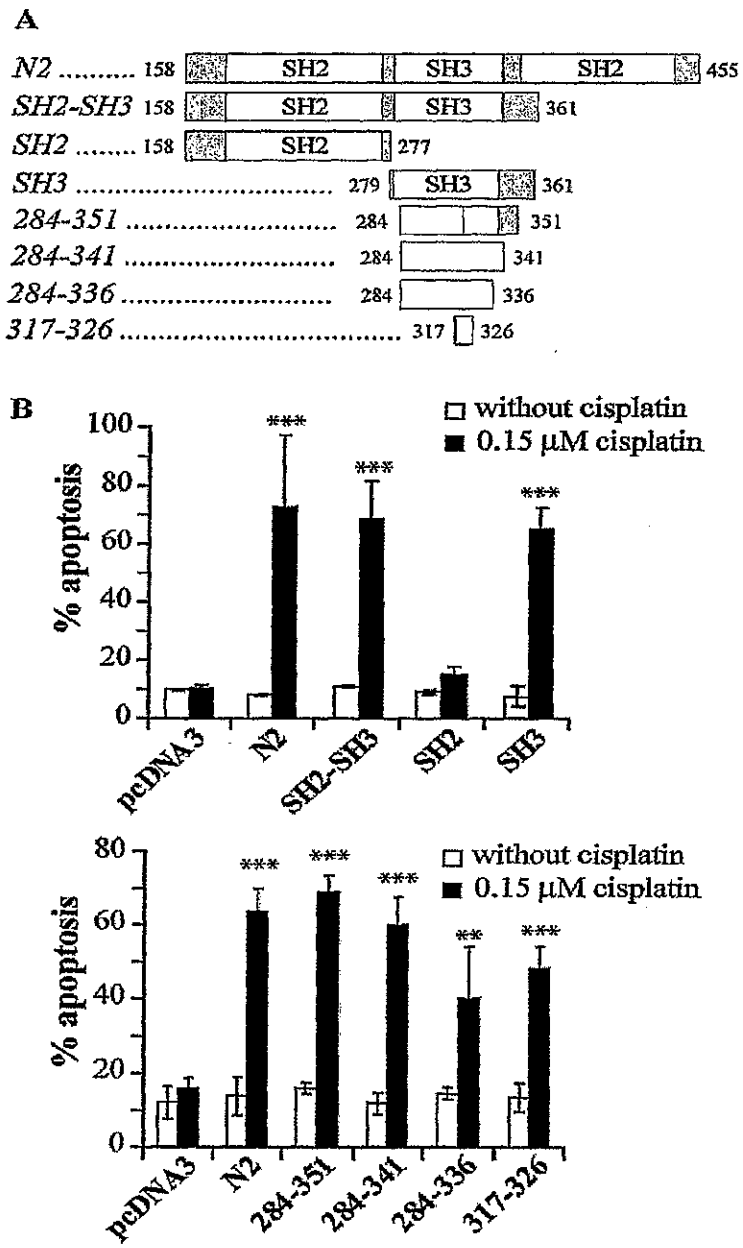

A
N2 ..... 158 SH2 SH3 SH2 455
SH2-SH3 158 SH2 SH3 361
SH2 ..... 158 SH2 277
SH3 ..... 279 SH3 361
284-351 ..... 284 351
284-341 ..... 284 341
284-336 ..... 284 336
317-326 ..... 317 326
B
without cisplatin
0.15 µM cisplatin
% apoptosis
100
80
60
40
20
0
***
pcDNA3
N2
SH2-SH3
SH2
SH3
without cisplatin
0.15 µM cisplatin
% apoptosis
80
60
40
20
0
***
**
pcDNA3
N2
284-351
284-341
284-336
317-326

FIG.3

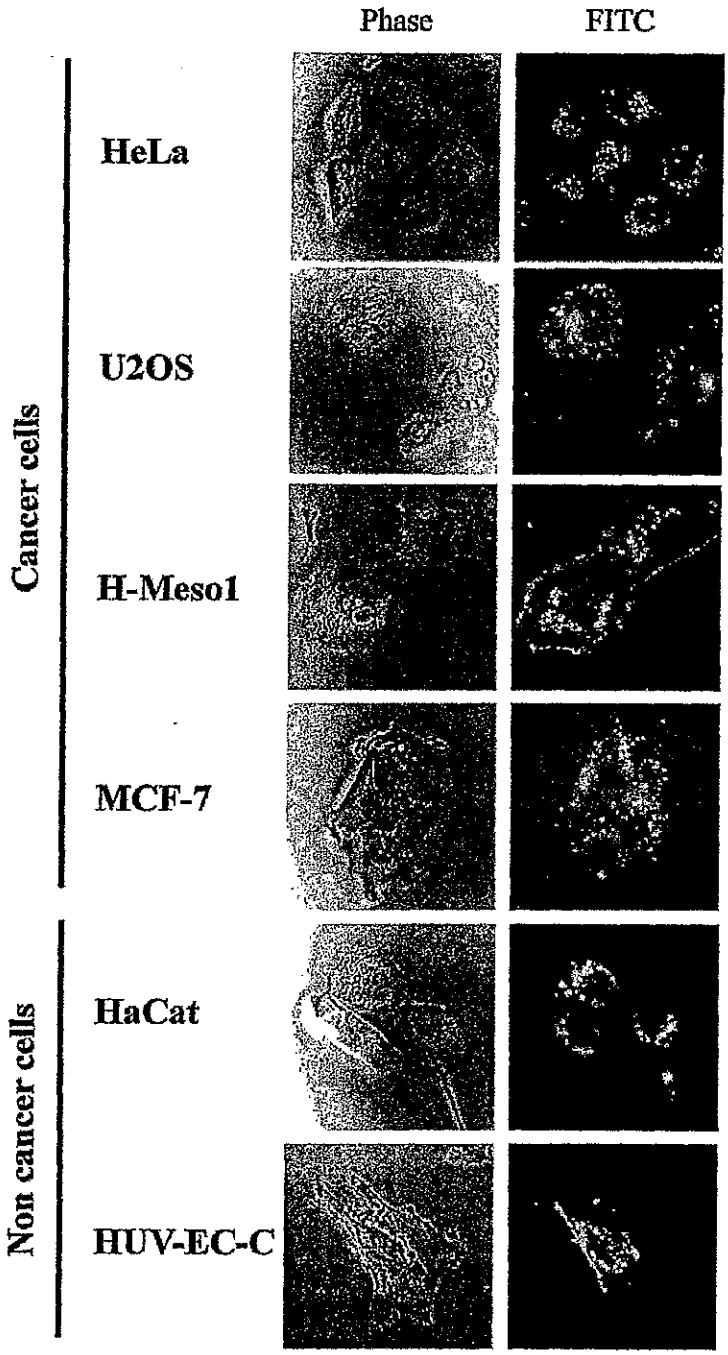

Phase
FITC
Cancer cells
HeLa
U2OS
H-Meso1
MCF-7
Non cancer cells
HaCat
HUV-EC-C

FIG.4 A

A

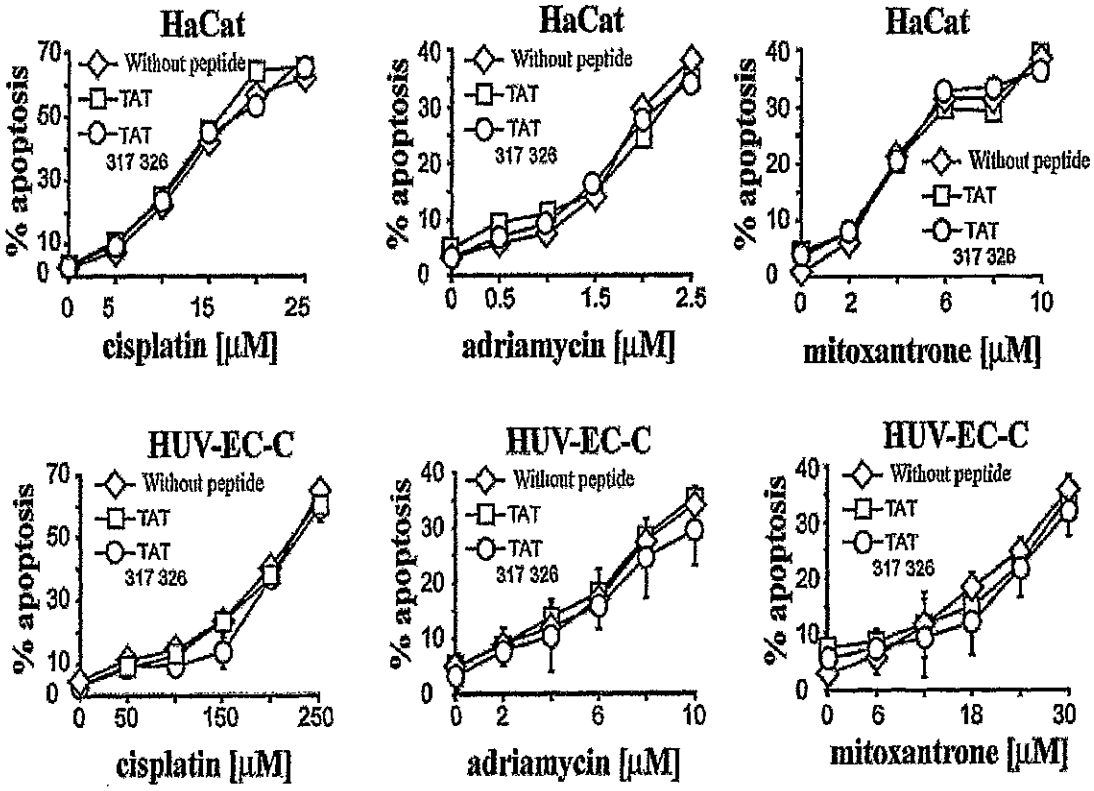

HaCat
% apoptosis
Without peptide
TAT
TAT 317 326
cisplatin [µM]
adriamycin [µM]
mitoxantrone [µM]
HUV-EC-C

FIG.4 B

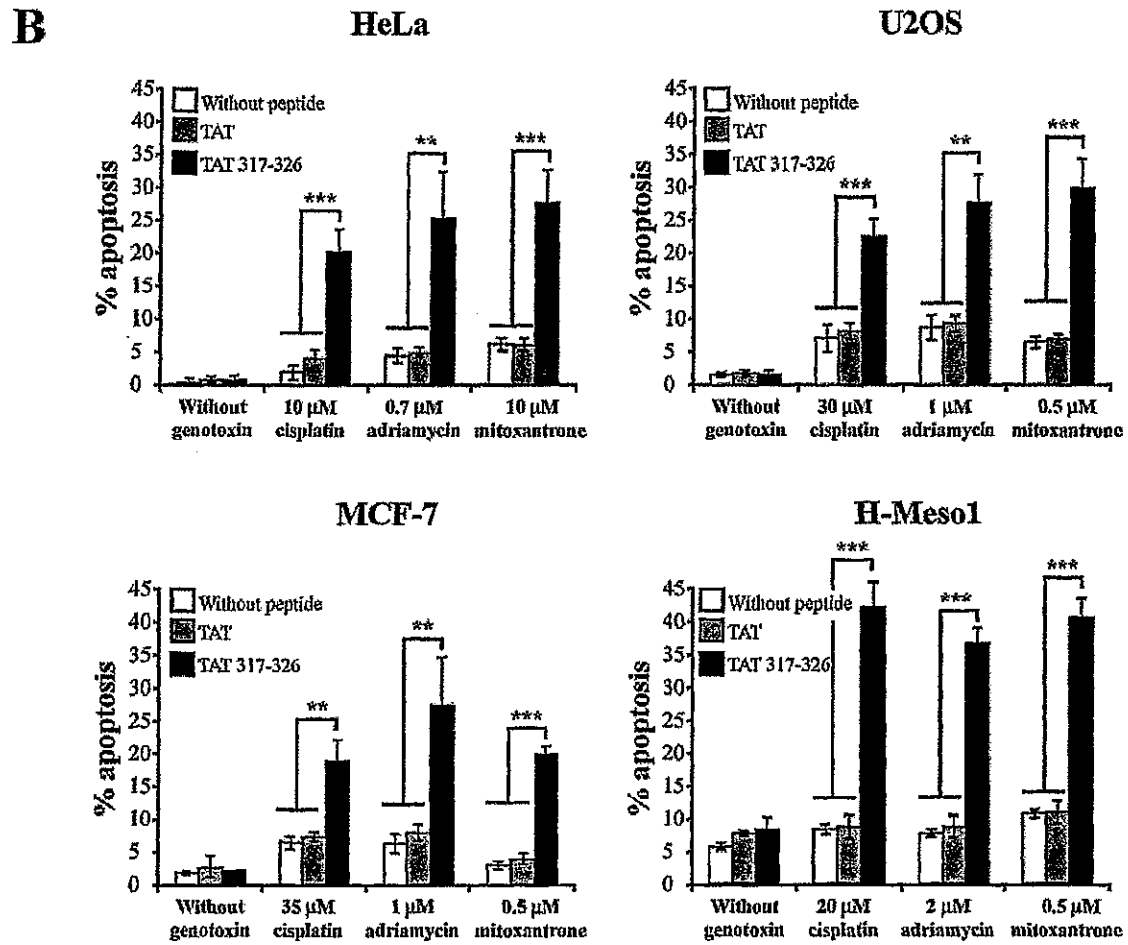

B
HeLa
U2OS
MCF-7
H-Meso1
Without peptide
TAT
TAT 317-326
% apoptosis
Without genotoxin
10 µM cisplatin
0.7 µM adriamycin
10 µM mitoxantrone
30 µM cisplatin
1 µM adriamycin
0.5 µM mitoxantrone
35 µM cisplatin
1 µM adriamycin
0.5 µM mitoxantrone
20 µM cisplatin
2 µM adriamycin
0.5 µM mitoxantrone

FIG.5 A

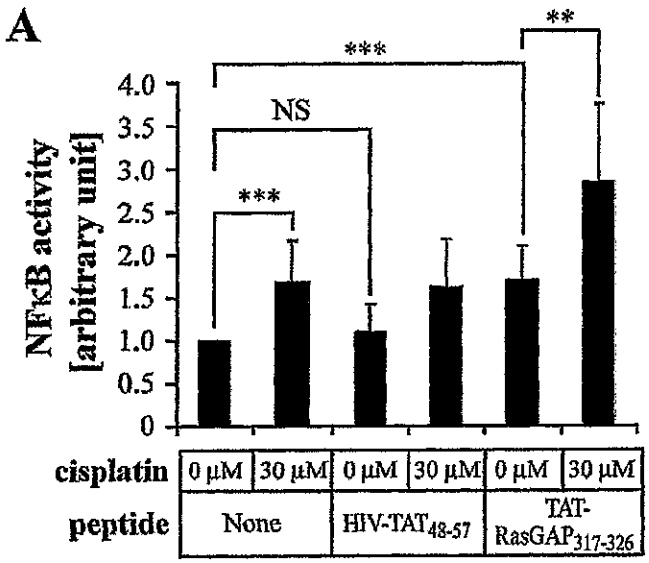

A
NFκB activity [arbitrary unit]
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
***
NS
***
**
cisplatin
0 μM
30 μM
0 μM
30 μM
0 μM
30 μM
peptide
None
HIV-TAT48-57
TAT-RasGAP317-326

FIG.5 B

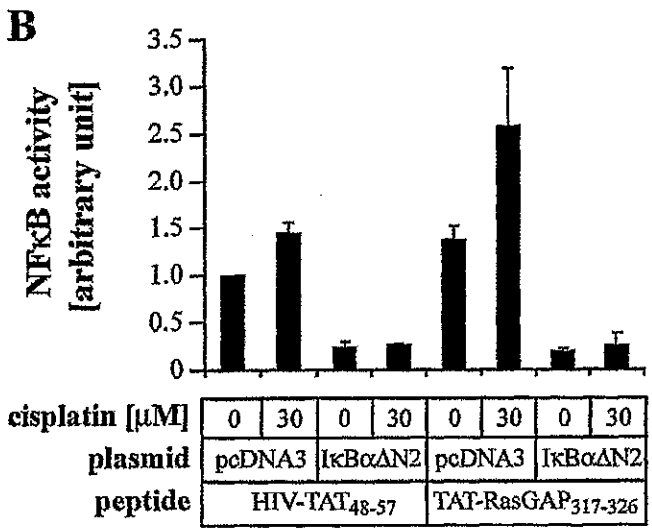

B
NFκB activity [arbitrary unit]
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
cisplatin [μM]
0
30
0
30
0
30
0
30
plasmid
pcDNA3
IκBαΔN2
pcDNA3
IκBαΔN2
peptide
HIV-TAT48-57
TAT-RasGAP317-326

FIG.5 C

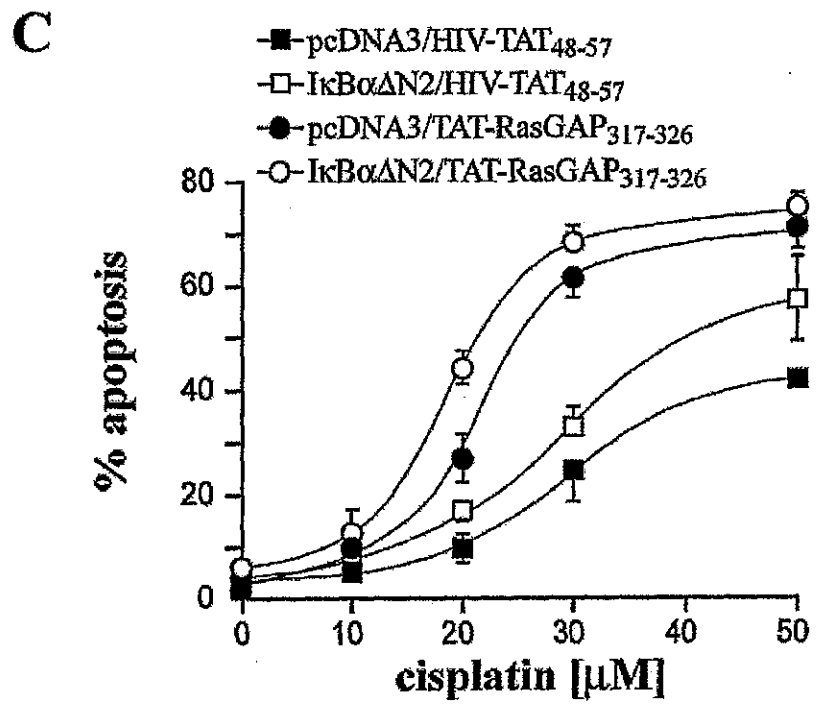
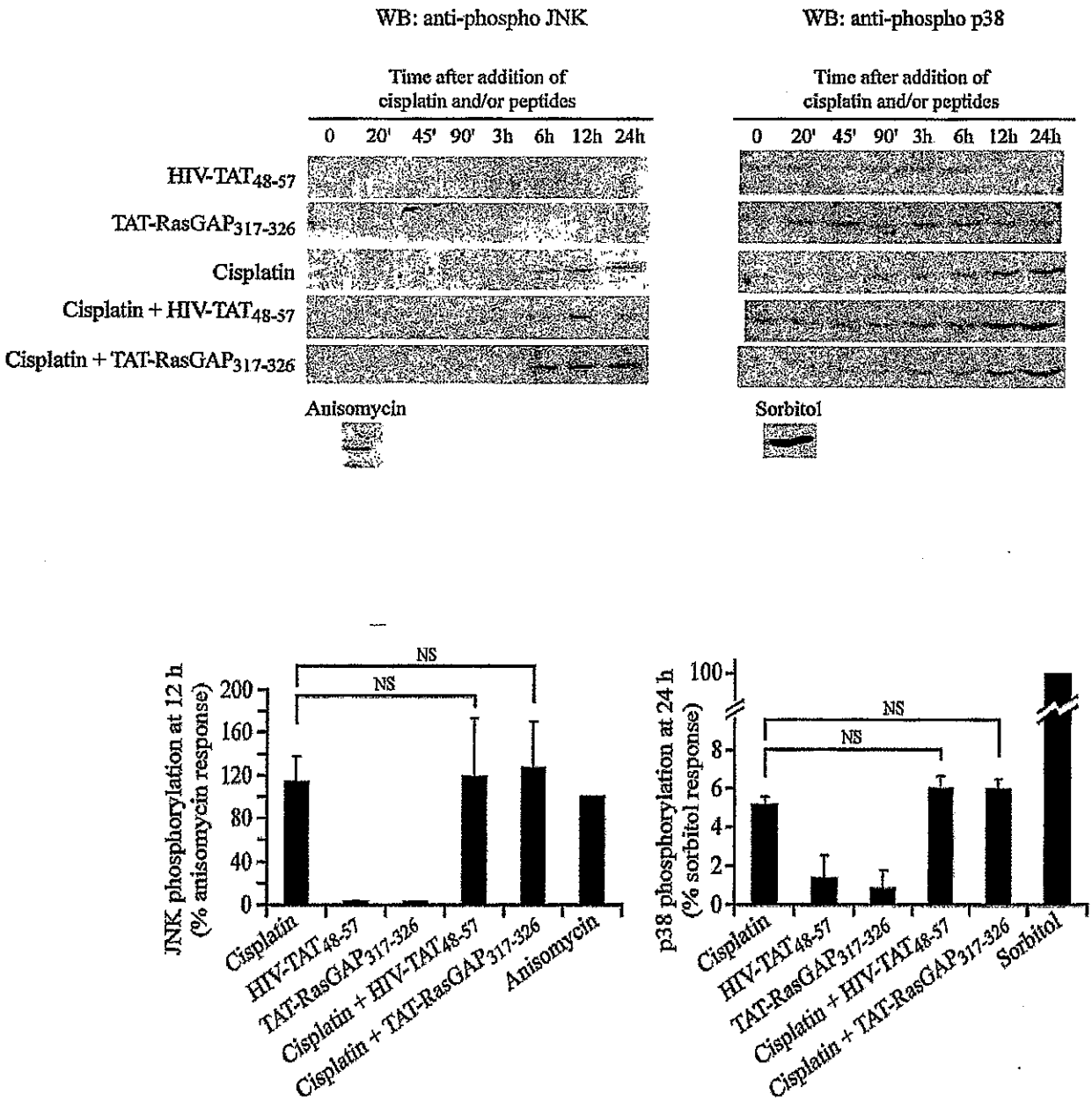

C
pcDNA3/HIV-TAT48-57
IκBαΔN2/HIV-TAT48-57
pcDNA3/TAT-RasGAP317-326
IκBαΔN2/TAT-RasGAP317-326
% apoptosis
0
20
40
60
80
0
10
20
30
40
50
cisplatin [μM]

FIG.6


WB: anti-phospho JNK
WB: anti-phospho p38
Time after addition of cisplatin and/or peptides
0 20' 45' 90' 3h 6h 12h 24h
HIV-TAT48-57
TAT-RasGAP317-326
Cisplatin
Cisplatin + HIV-TAT48-57
Cisplatin + TAT-RasGAP317-326
Anisomycin
Sorbitol
JNK phosphorylation at 12 h (% anisomycin response)
p38 phosphorylation at 24 h (% sorbitol response)
NS
Cisplatin
HIV-TAT48-57
TAT-RasGAP317-326
Cisplatin + HIV-TAT48-57
Cisplatin + TAT-RasGAP317-326
Anisomycin
Sorbitol