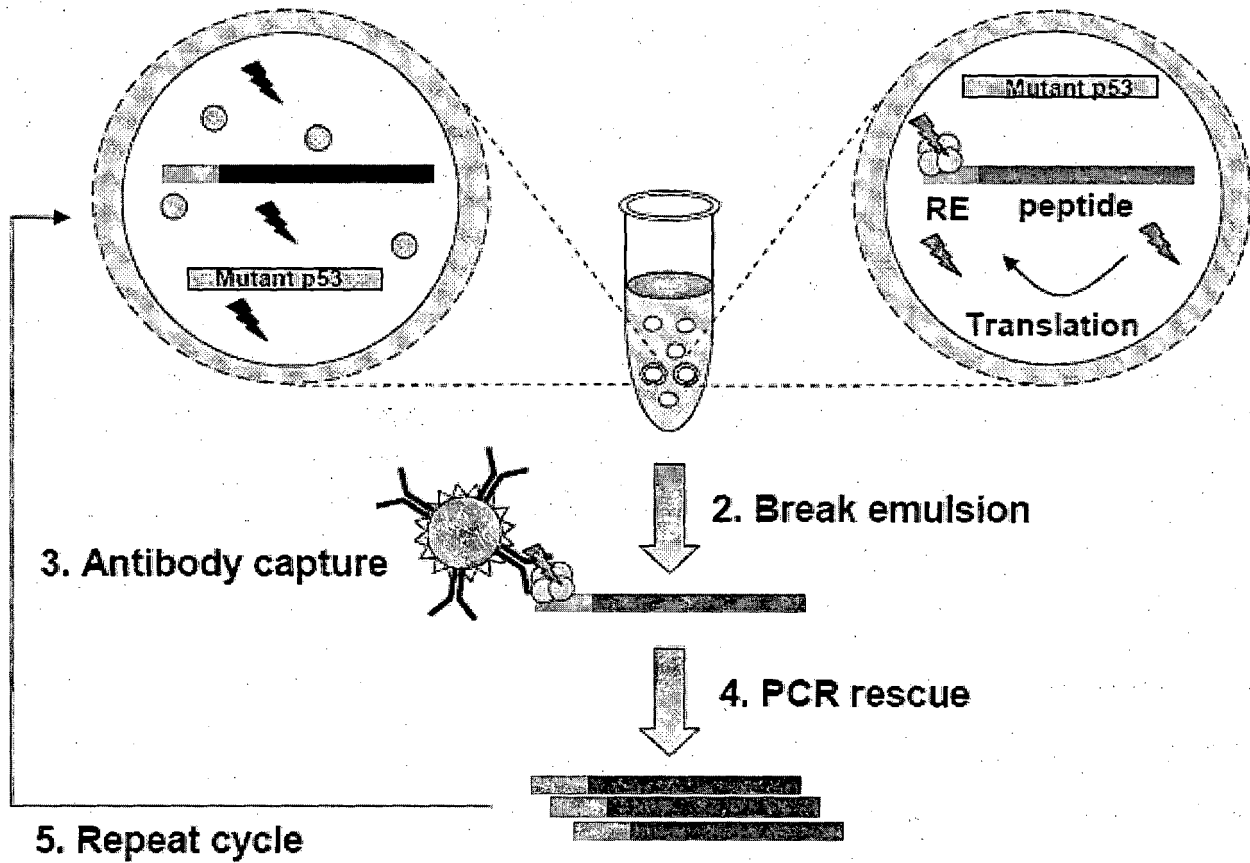


1/ 82

FIG. 1

1. Compartmentalization

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FIG. 2

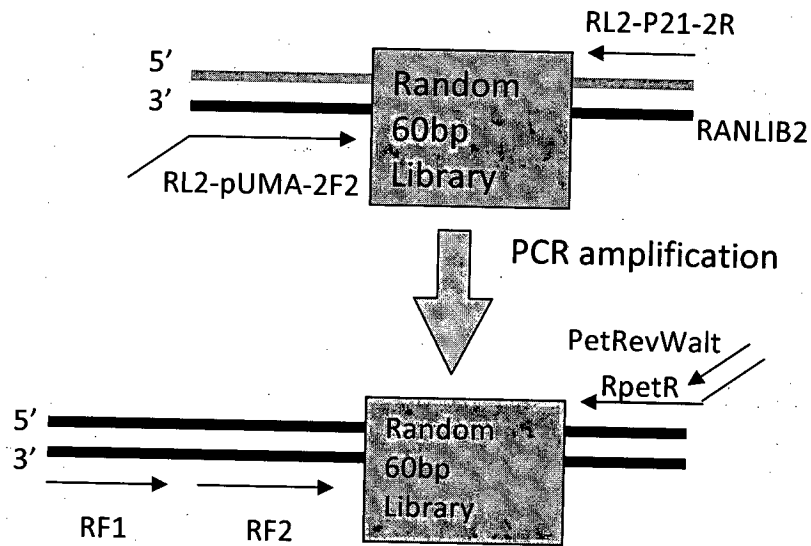
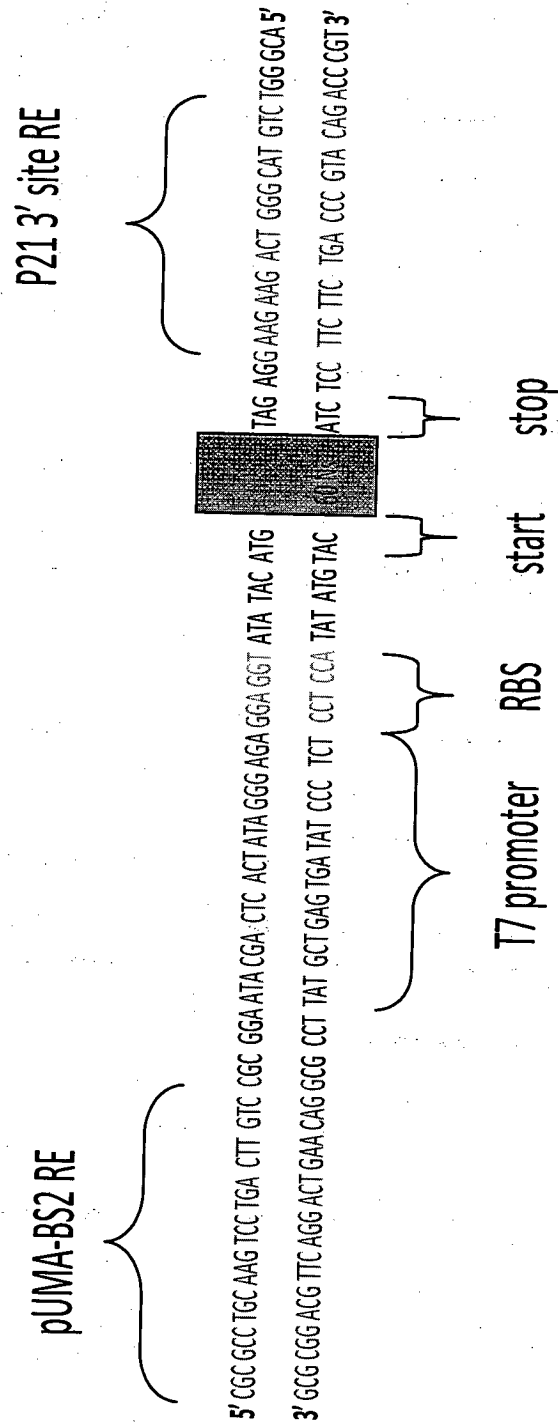
A

Fig. 2 (continued)

B



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FIG. 2 (continued)

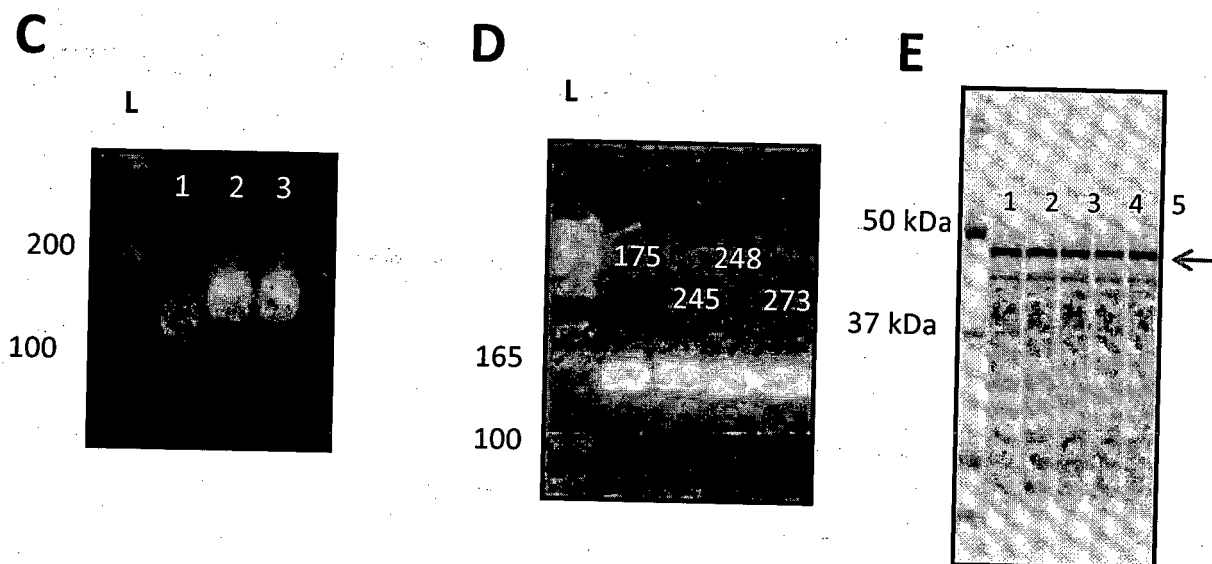
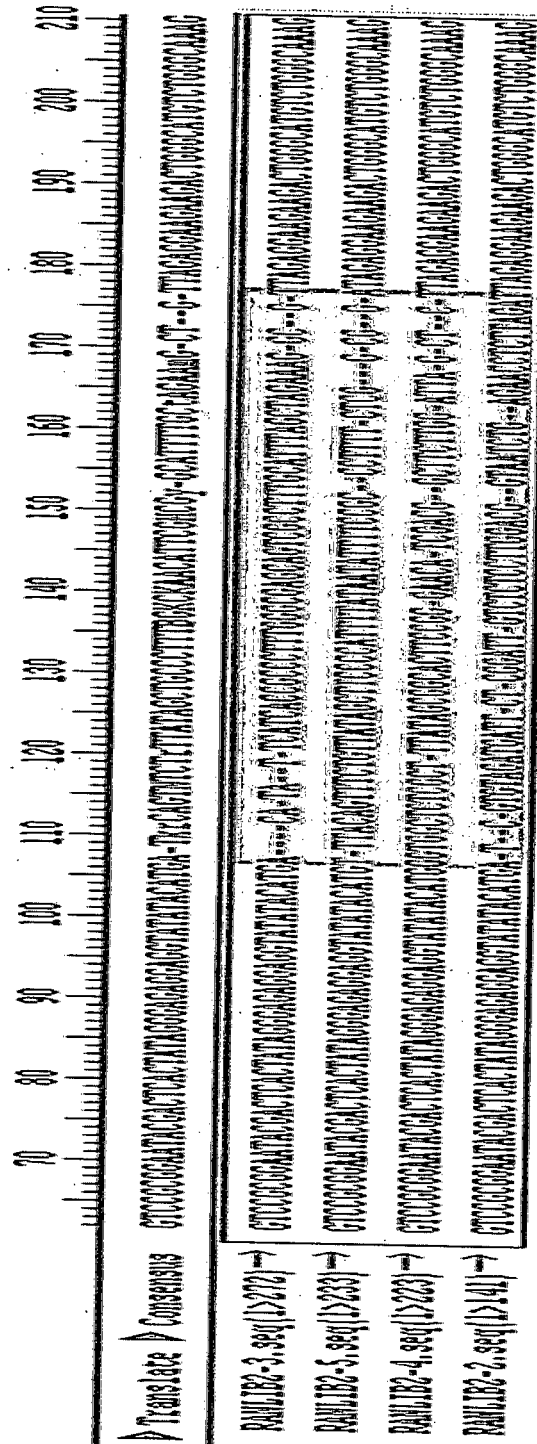


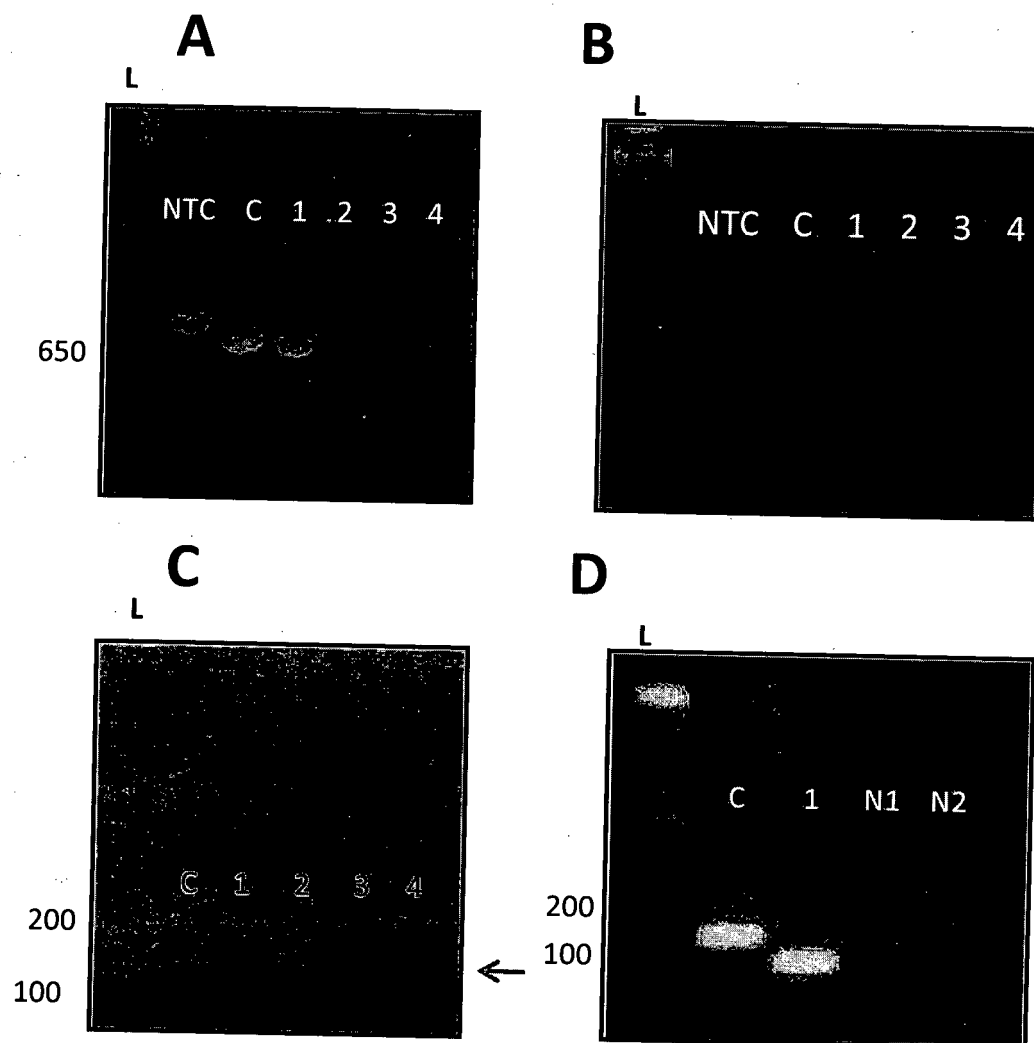
Fig. 2 (continued)

F



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FIG. 3



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Fig. 4

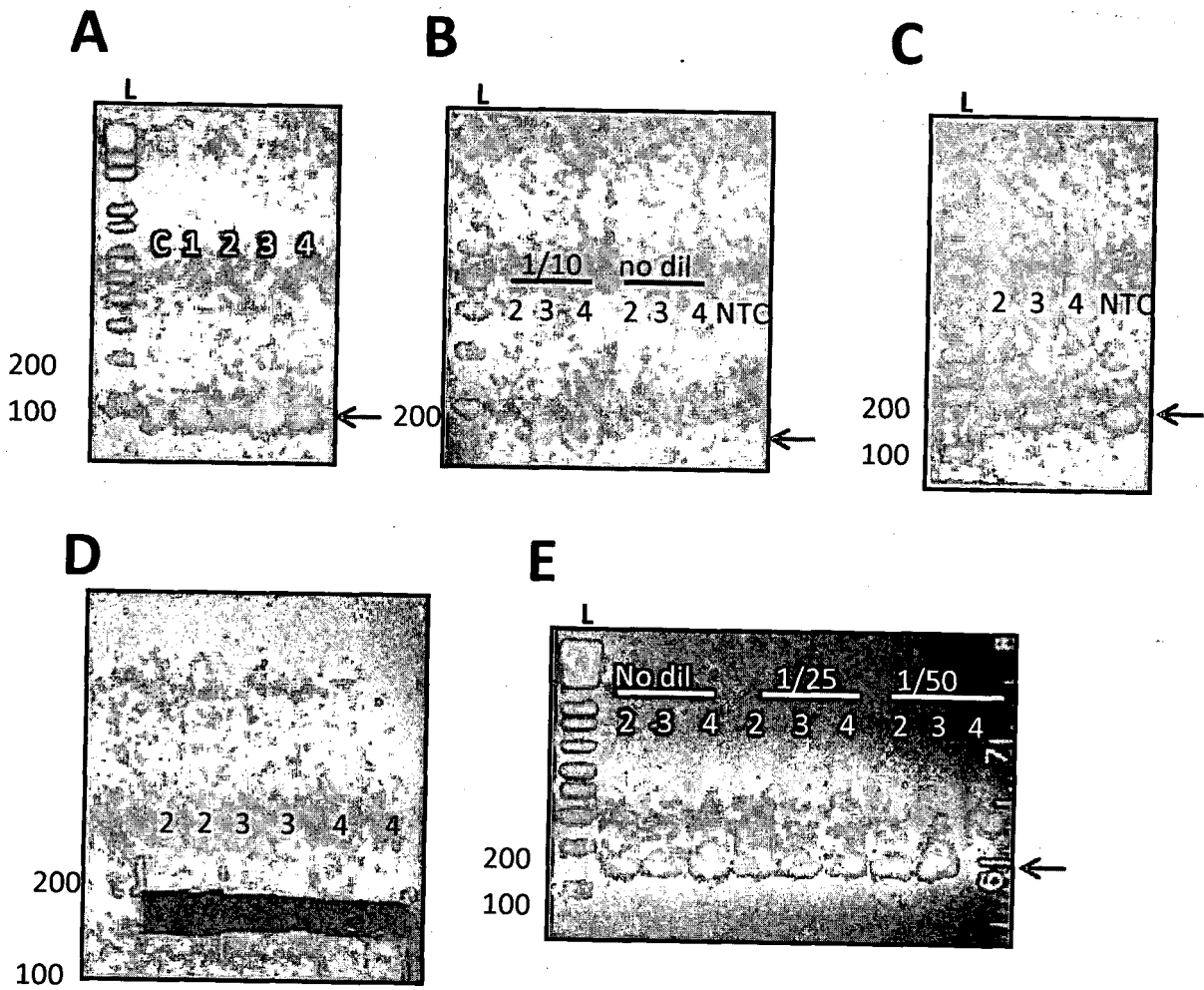
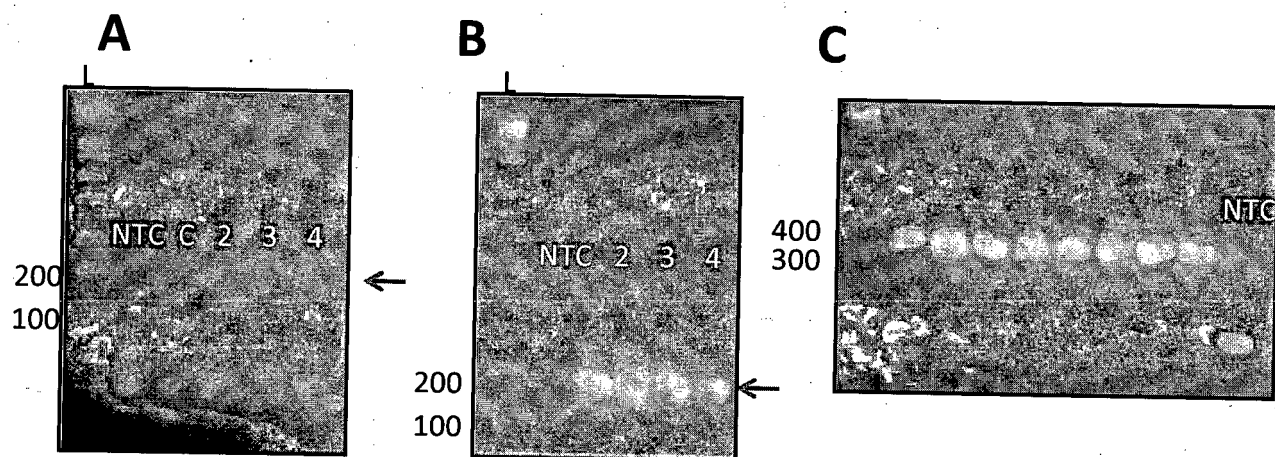
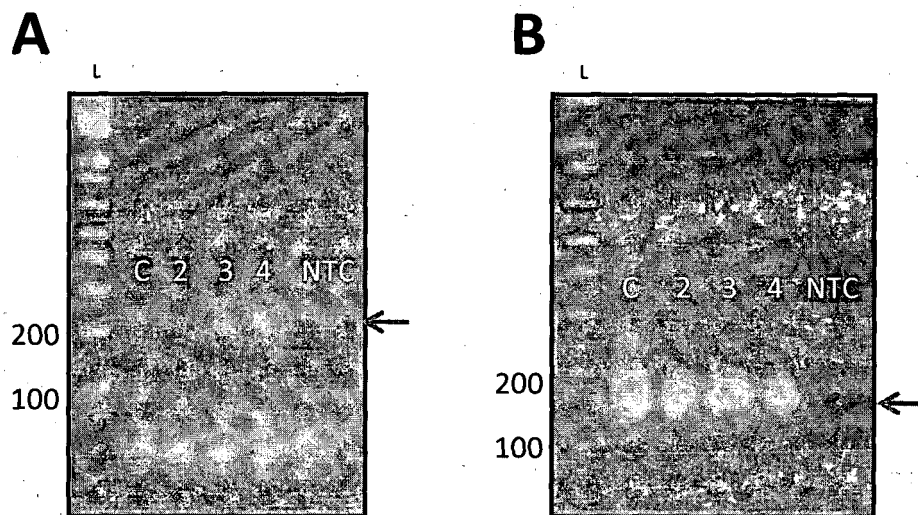


Fig. 5



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FIG. 6



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Fig. 6 (continued)

C

Clone	G245S	R248Q	R273H
1	SPNTNH	ILNVLPPLASRKP	RLQQV
2	MPHLMAC	VSWACVLLELCNYFPENPIEE EDWACLG	ARHQHVGATI LGWK
3	SPTTNH	VSWACVLEELCNYPENPIEE EDWACLG	VRHQHVGATI LGWK
4	SPTTNH	ILNVLPPLASRKP	TALIDIWEHS VLGKGYPMS
5	DELVAIPVRLTY RGNIAI	ILNVLPPLASRKP	LM
6	SPTTNH	VSWACVLLELCNYFPENPIEE EDWACLG	TALIDIWEHS VLGKGYPMS
7	MPHLMAC	ILNVLPPLASRKP	RLQQV
8	SPTTNH	VSWACVLLELCNYFPENPIEE EDWACLG	VRHQHVGATI LGWK
9	MPHLMAC	ILNVLPPLASRKP	RLQQV
10	ERRFPIMGVNSPE GKMWPLI	VSWACVLLELCNYFPENPIEE EDWACLG	TALIDIWEHS VLGKGYPMS
11	SPTTNH	VSWACVLEELCNYPENPIEE EDWACLG	TALIDIWEHS VLGKGYPMS
12	DELVAIPVRLTY RGNIAI	ILNVLPPLASRKP	VRHQHVGATI LGWK
13	ERRFPIMGVNSPE GKMWPLI	ILNVLPPLASRKP	RLQQV
14	SPTTNH	ILNVLPPLASRKP	VRHQHVGATI LGWK
15	MPHEMAC	ILNVLPPLASRKP	TALIDIWEHS VLGKGYPMS
16	MPHLMAC	ILNVLPPLASRKP	VRHQHVGATI LGWK

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Fig. 6 (continued)

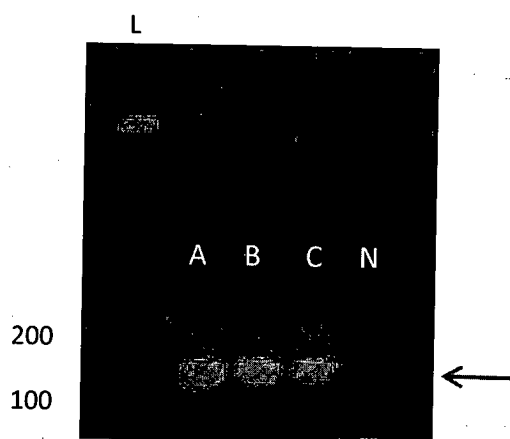
D

No.	Peptide Reference	Amino Acid Sequence	p53 mutant
1	Pap-SPT	SPTTNH	G245S
2	Pap-MPH	MPHLMAC	G245S
3	Pap-TAL	TALIDIWEHSVLGKGYPRMS	R273H/G245S
4	Pap-ILN	ILNVLP LLASRKP	R248Q
5	Pap-VSW	VSWSACV LLELCNYPENPIEEEDWACLG	R248Q
6	Pap-RLQ	RLQQV	R273H
7	Pap-VRH	VRHQHVGA TELGWK	R273H

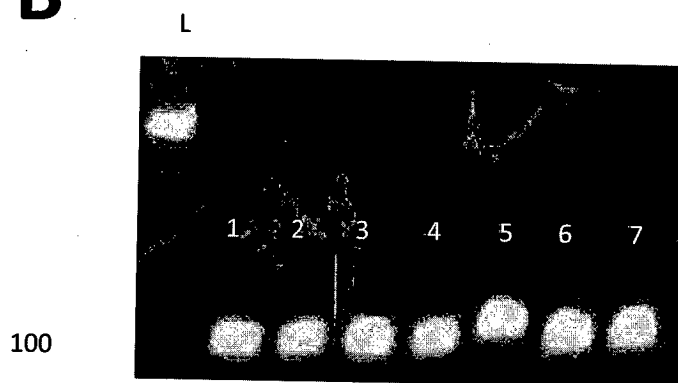
12/ 82

Fig. 7

A

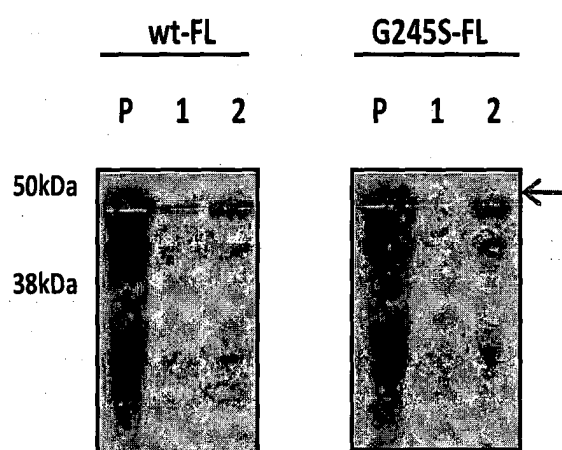
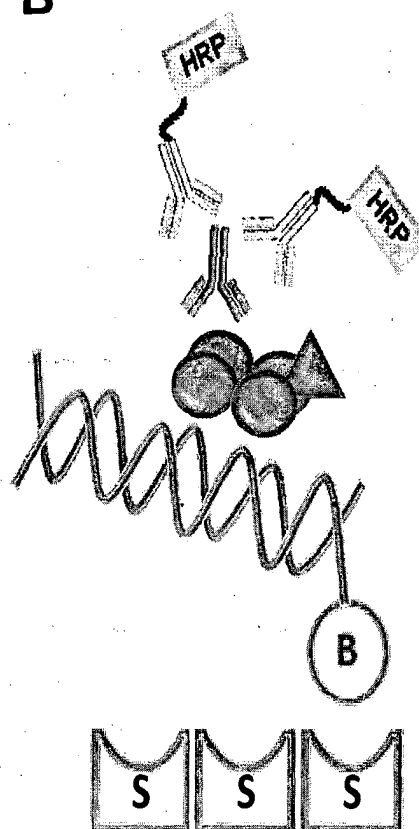


B



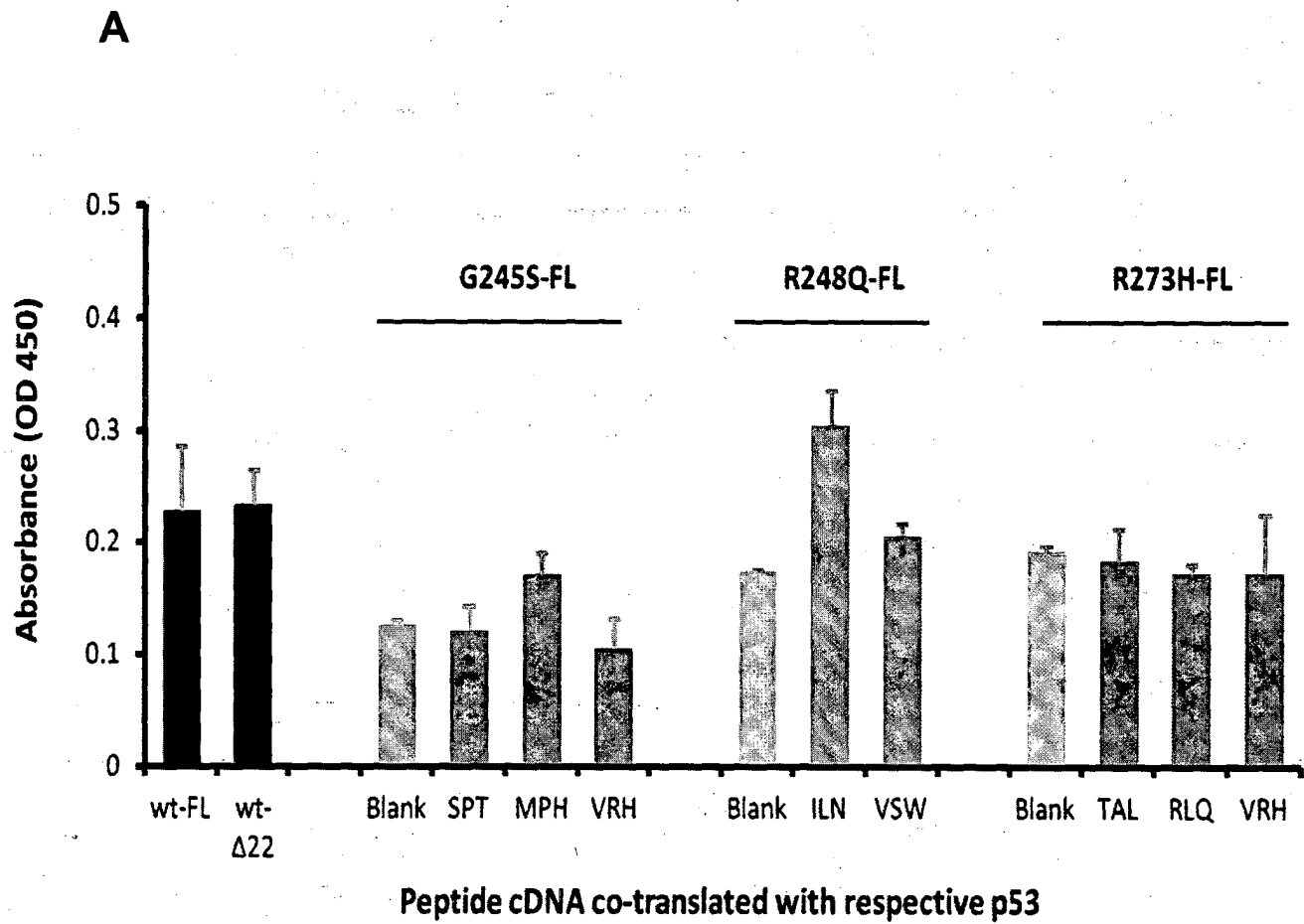
13/ 82

FIG. 8

A**B**

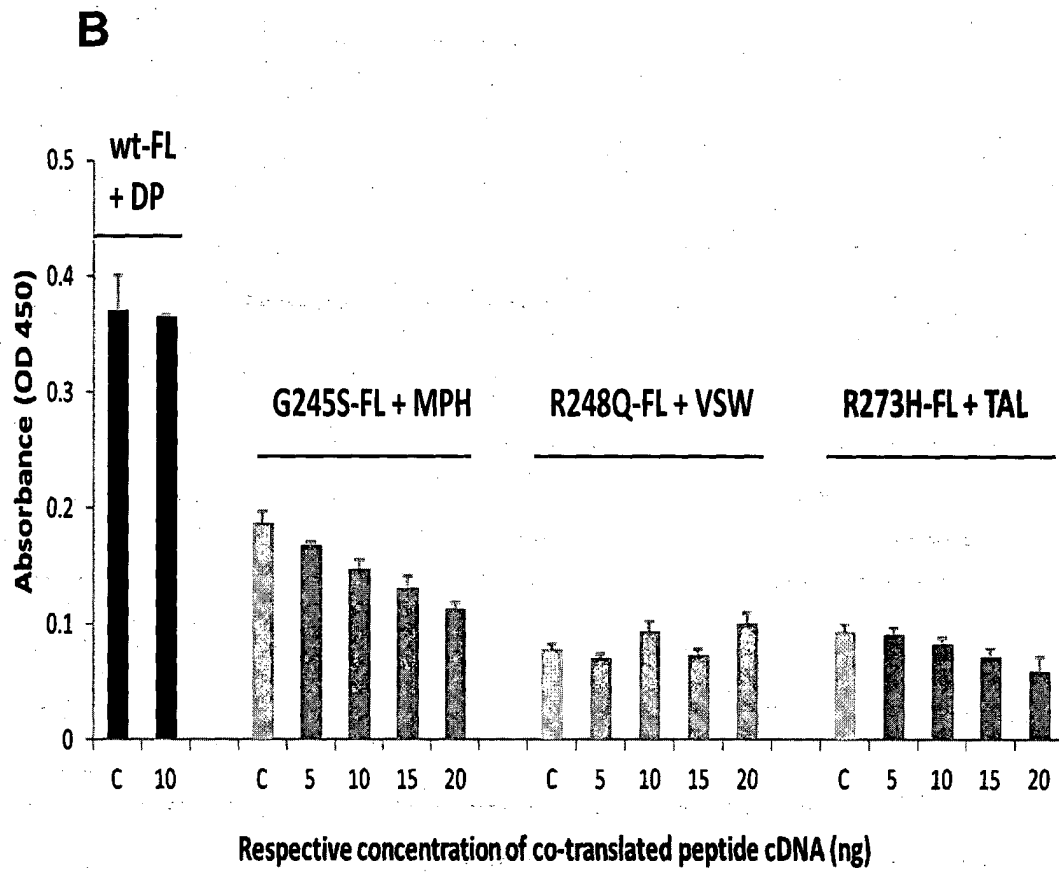
14/ 82

Fig. 9

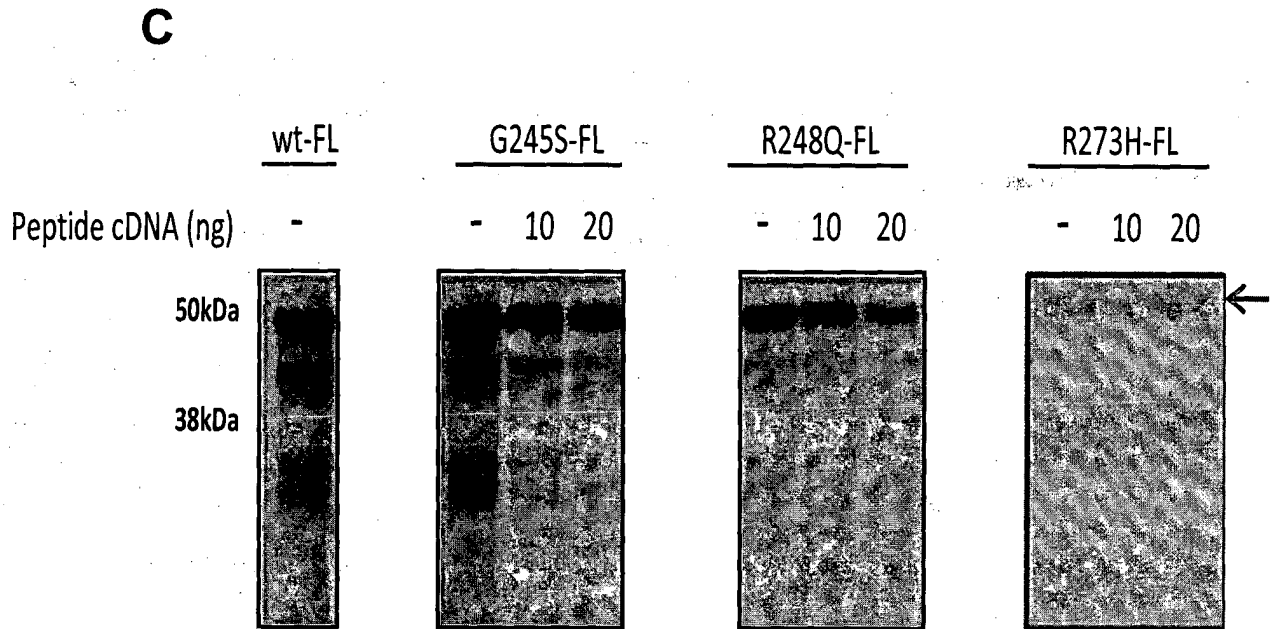


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Fig. 9 (continued)

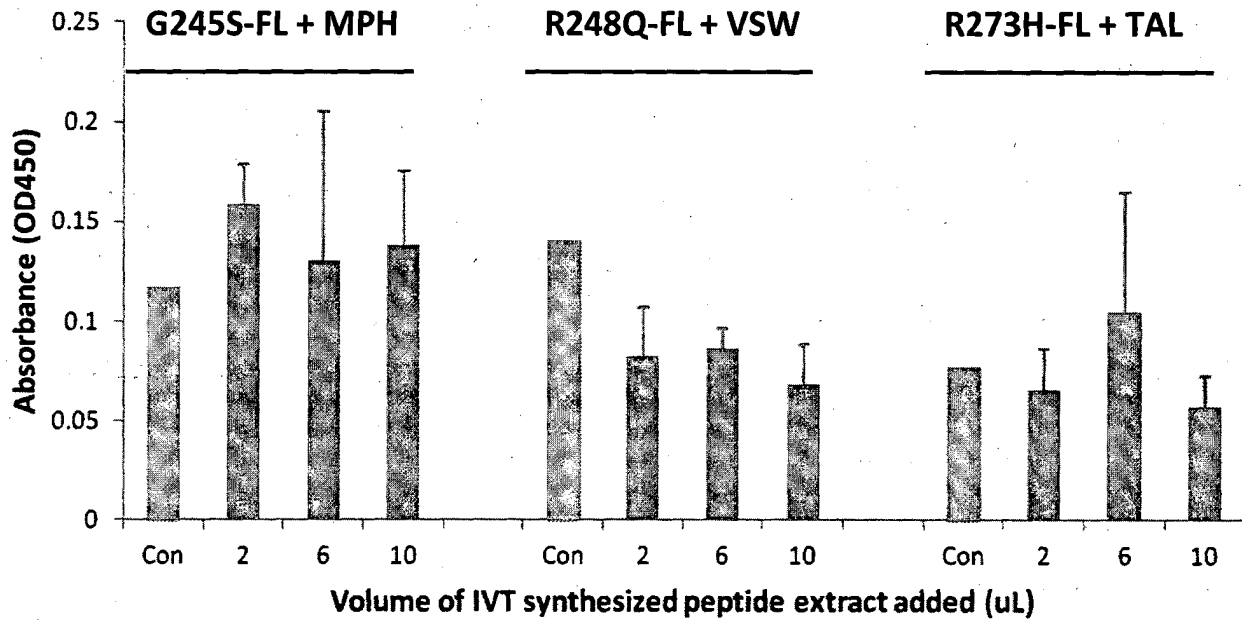
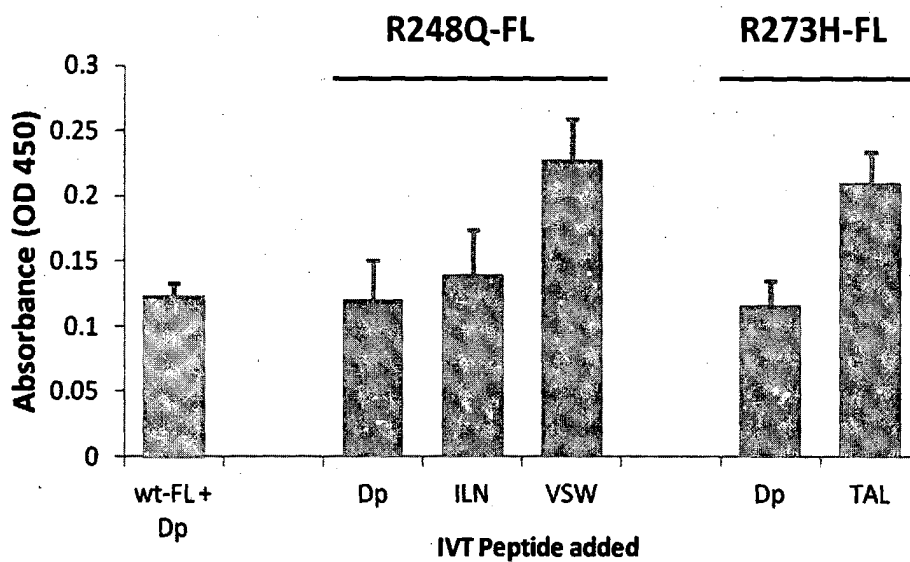


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Fig. 9 (continued)

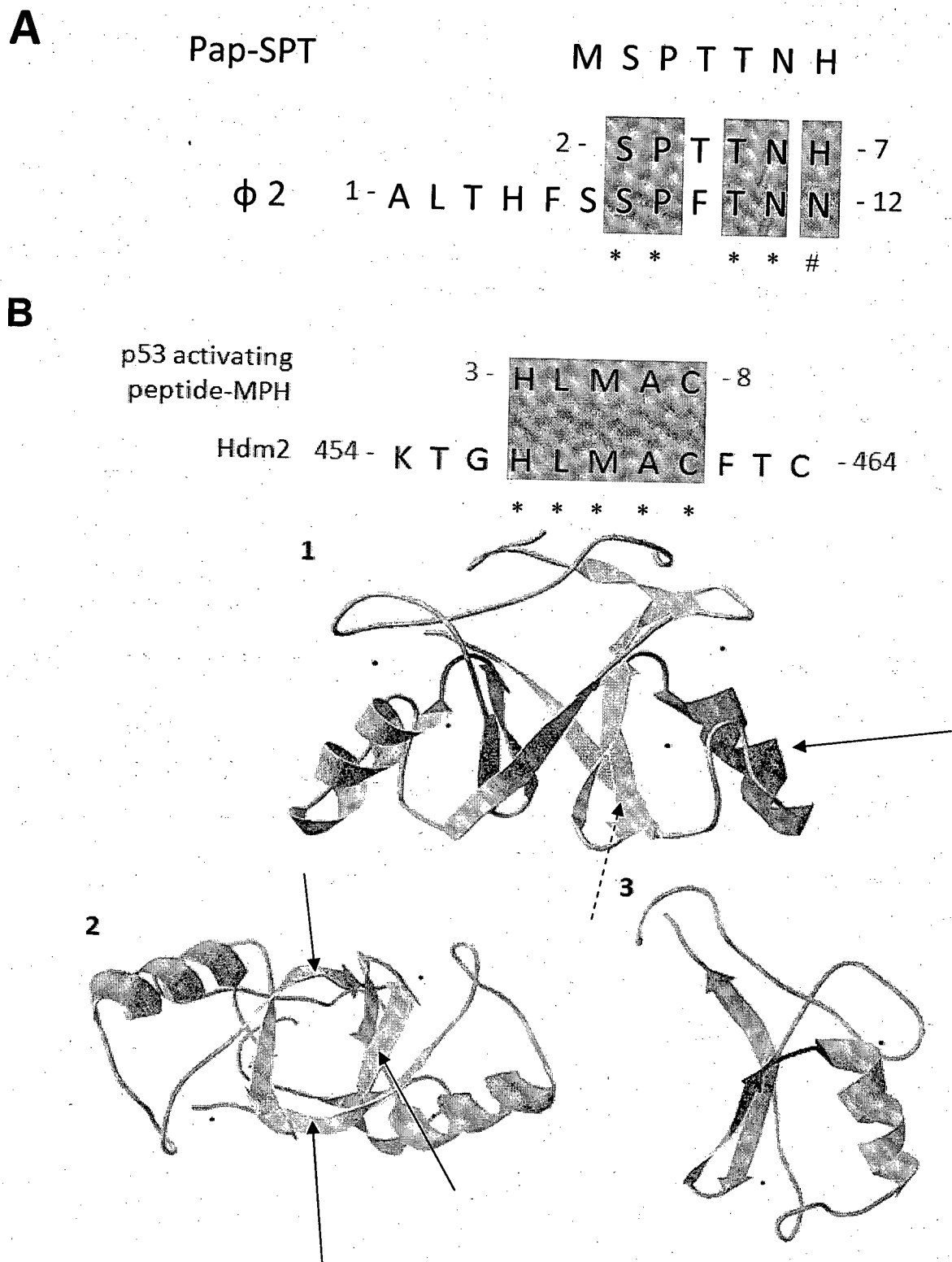
17/ 82

Fig. 9 (continued)

D**E**

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Fig. 10



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Fig. 10 (continued)

C

Pap-VSW

VSWSACVLLLELCNYFPENPIEEEDWACLG

Pap-VSW
PARP4 protein

11- LCNYFPENPIEEED-24
118- LC --- PDNATEEEED-128
* * * # * † * * * *

Pap-VSW
PARP4 protein

13- YFPENPIEE-22
214- YY- ENYIEE-221
* # * * * * *

Pap-VSW
Peptide CDB3

20- IEEEDWAC-27
REDEDEIEW

D

Pap-TAL

TALIDIWEHSVLGKGYPRMS

Human Lymphoid
Tyrosine
Phosphatase Catalytic
Domain

1- TALID - - - - IWEHSVL-12
104- GPLSTTLDFWRMIWEYSVL I-124
* # * # * * * * # * * *

1

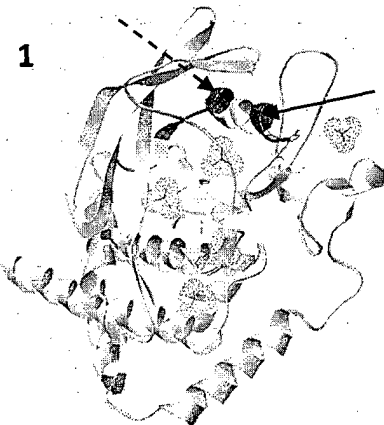
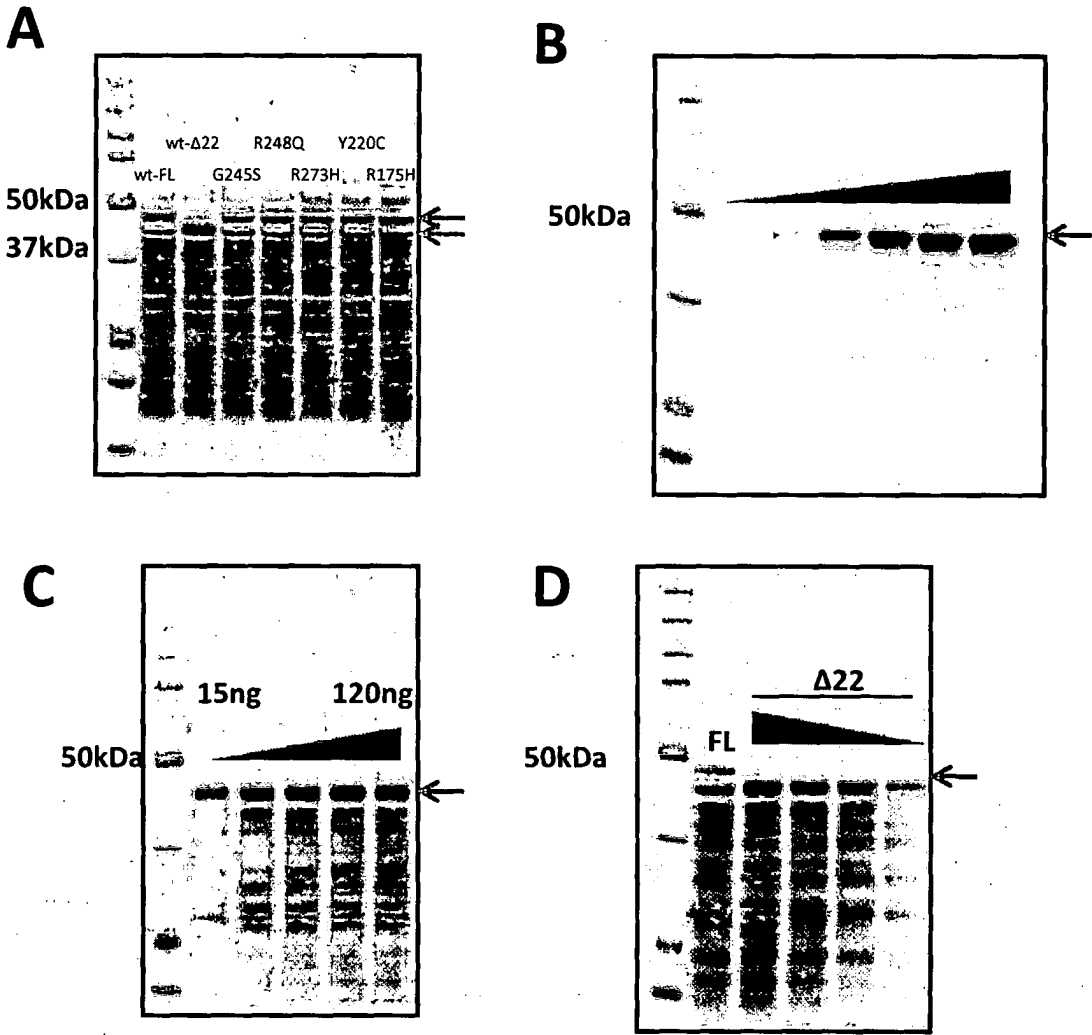


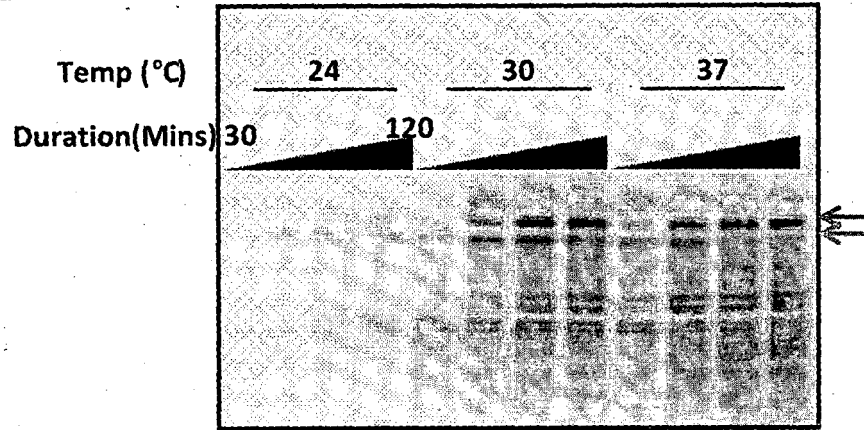
Fig. 11



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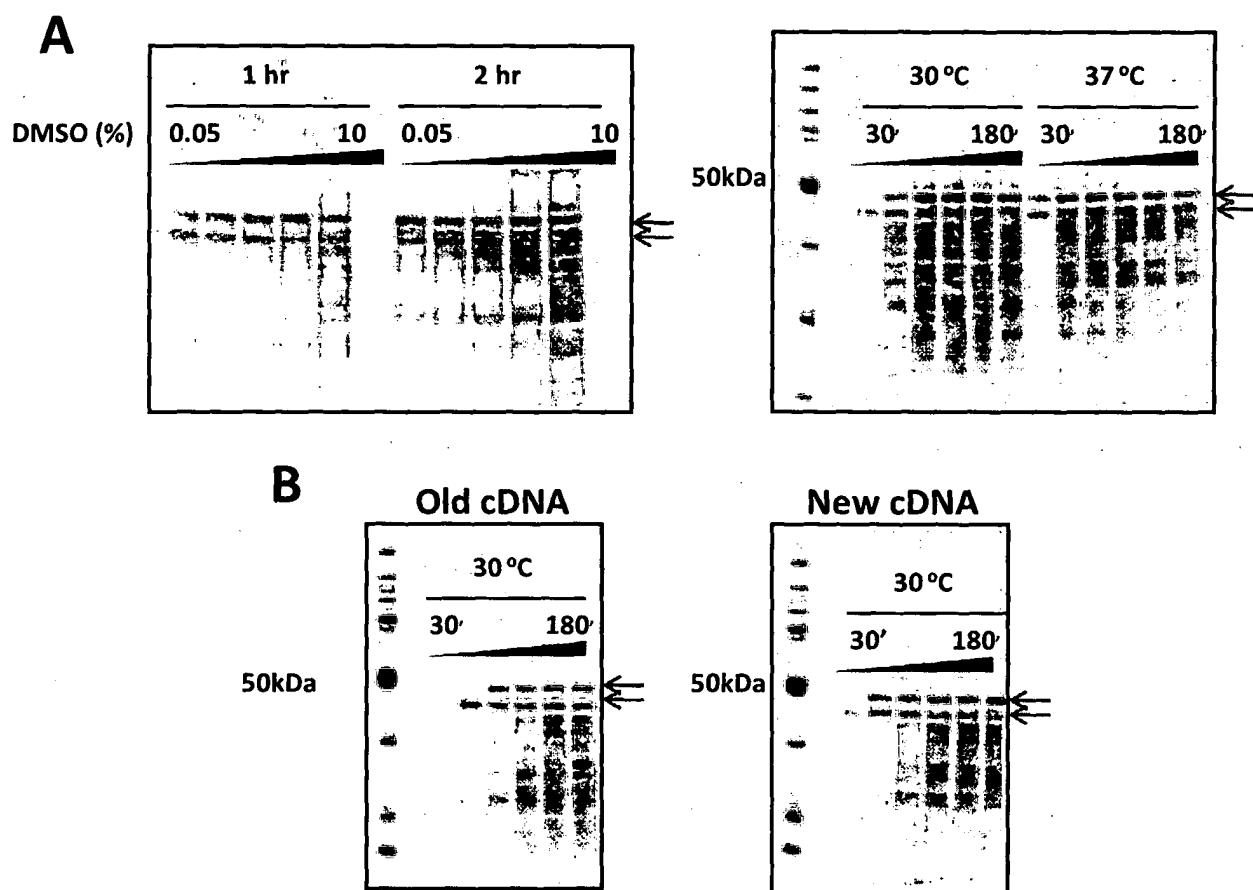
Fig. 11 (continued)

E



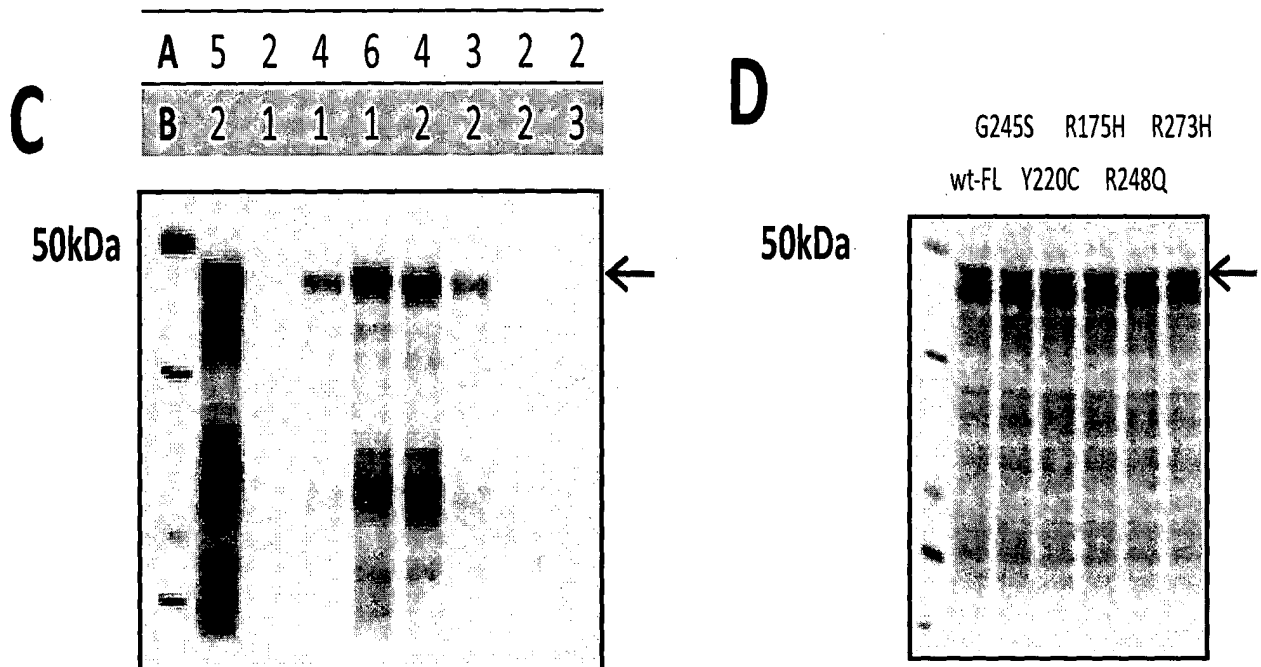
22/ 82

Fig. 12



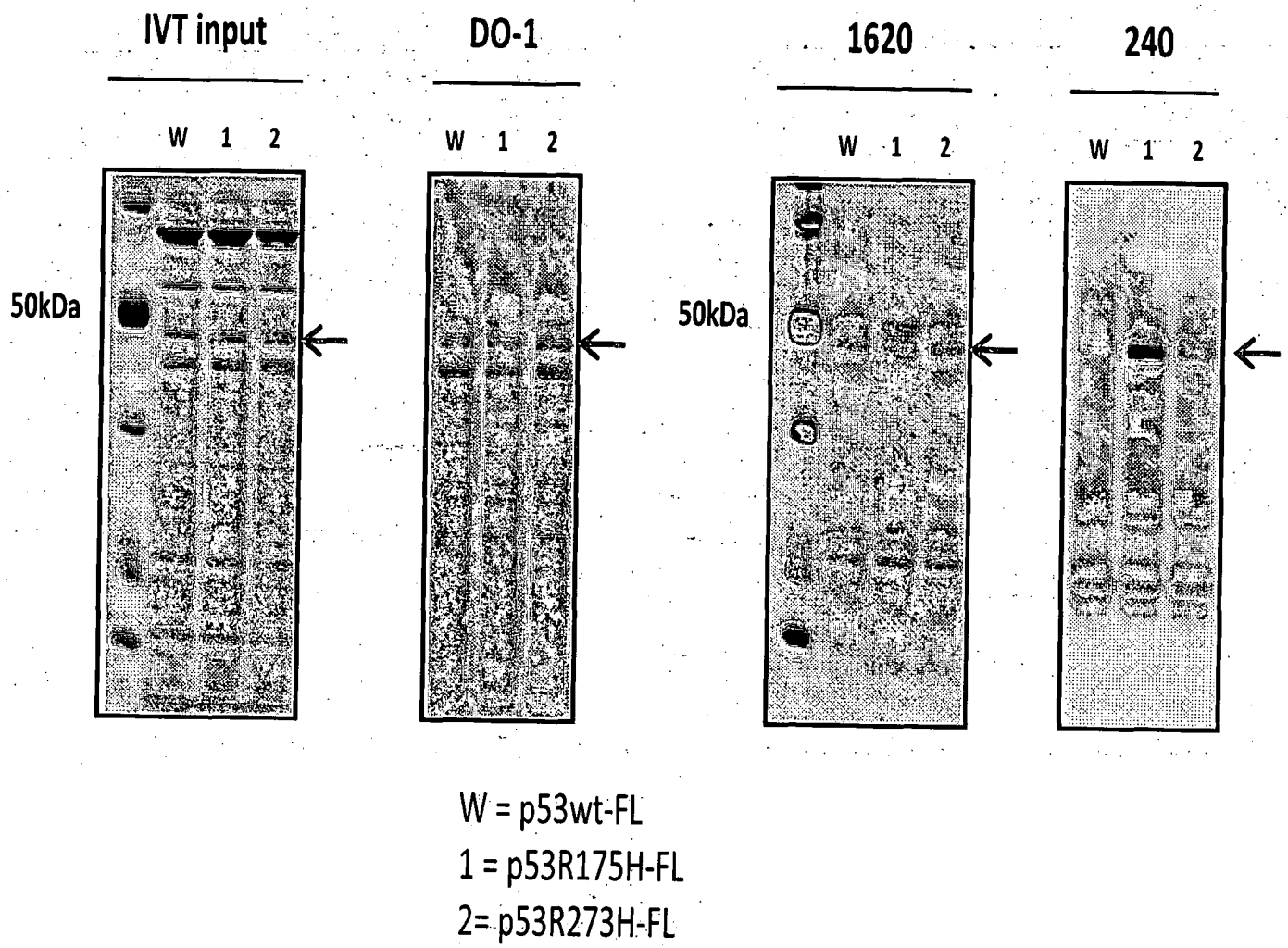
23/ 82

Fig. 12 (continued)



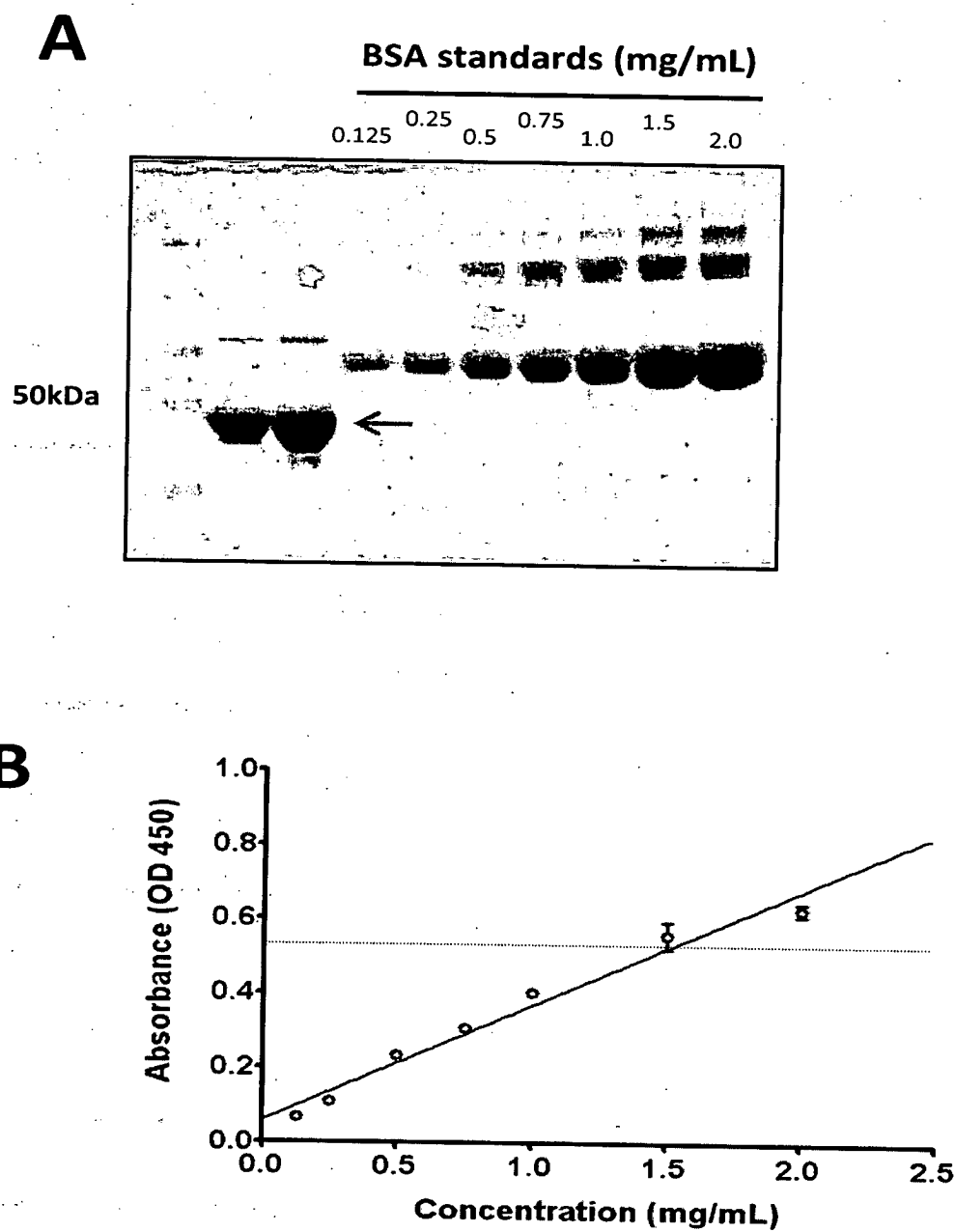
24/ 82

Fig. 13



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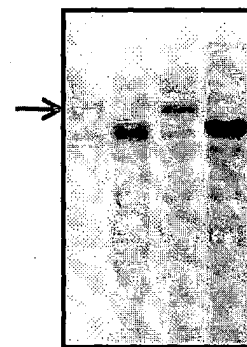
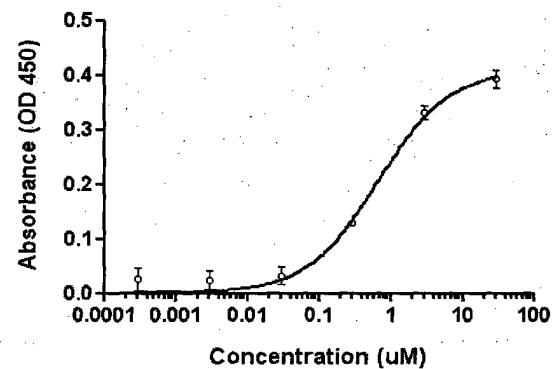
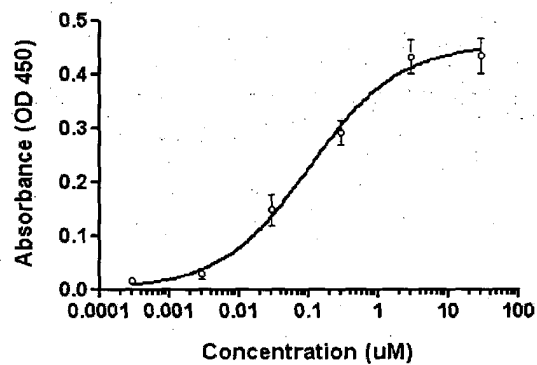
Fig. 14



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Fig. 14 (continued)

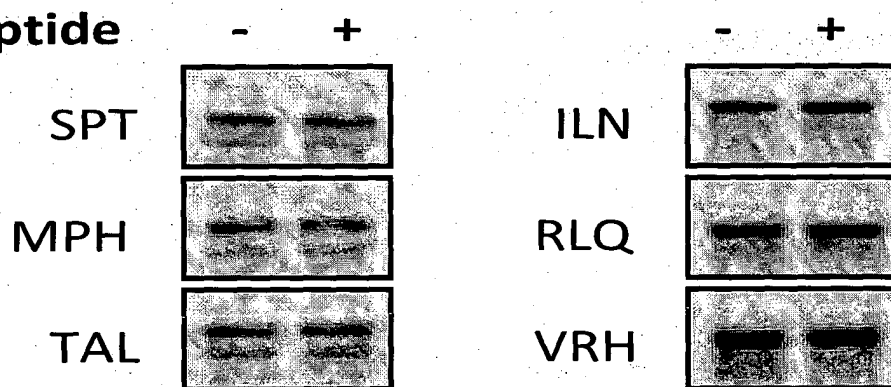
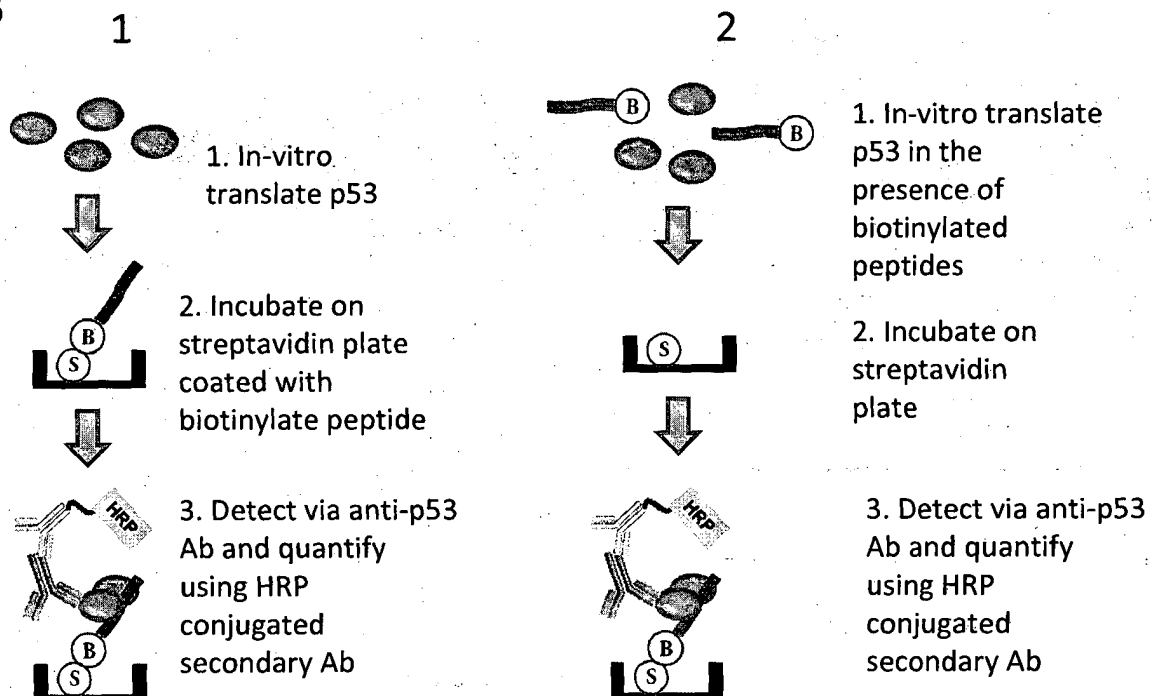
C



p53 Sample	DO-1 (uM)	Bp53 10.1 (uM)	Lane	Est. Conc. (nM)
wt-FL	0.086±0.008	0.072±0.018	1	65-80
wt-Δ22	0.177±0.029	<u>0.130</u>	2	200-300
wt-FL (5% DMSO)	0.310±0.05	0.273±0.084	3	200-250
wt-Δ22 (5% DMSO)	0.760±0.325	<u>0.295</u>	4	700-800

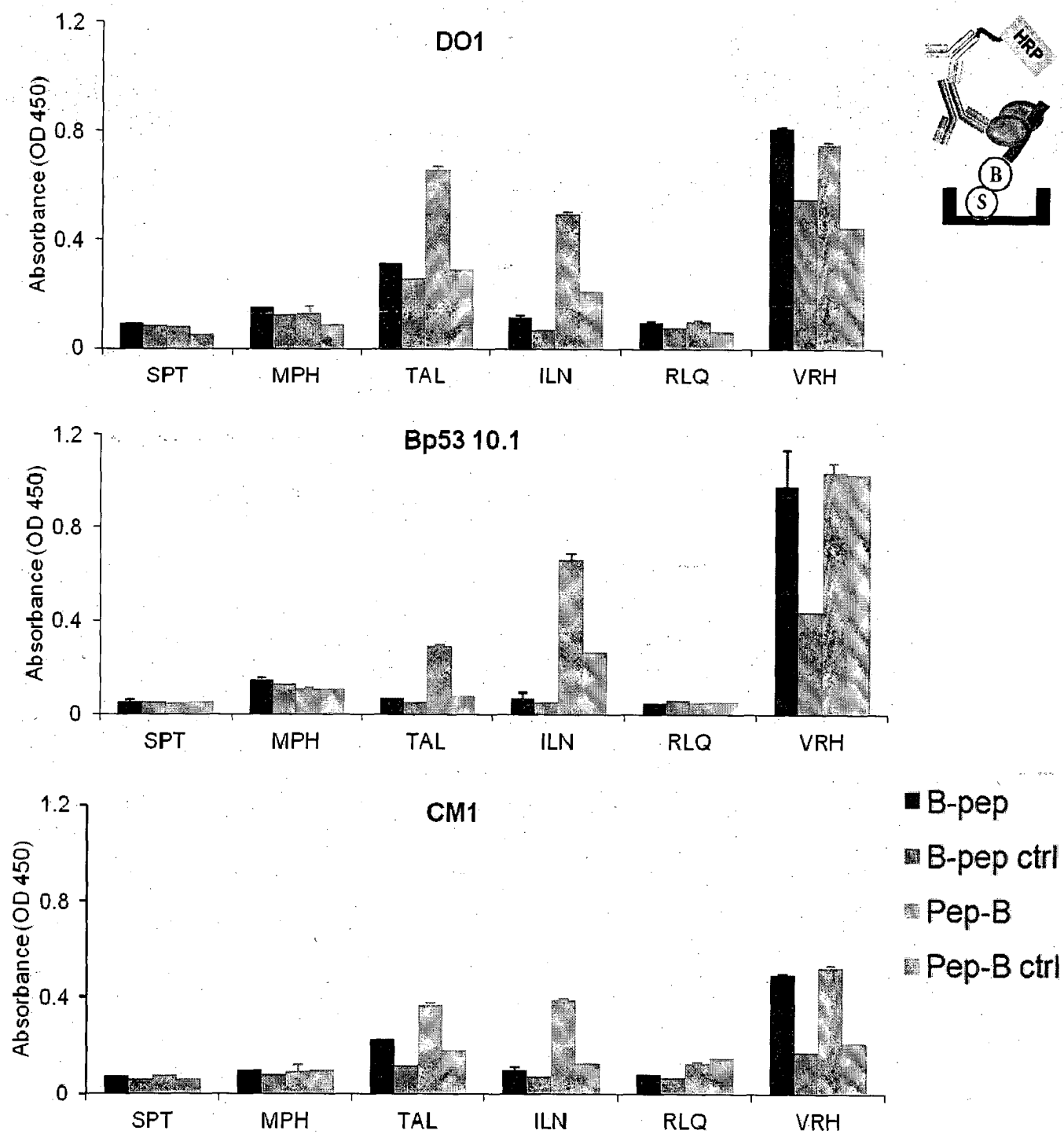
27/ 82

Fig. 15

A**Peptide****B**

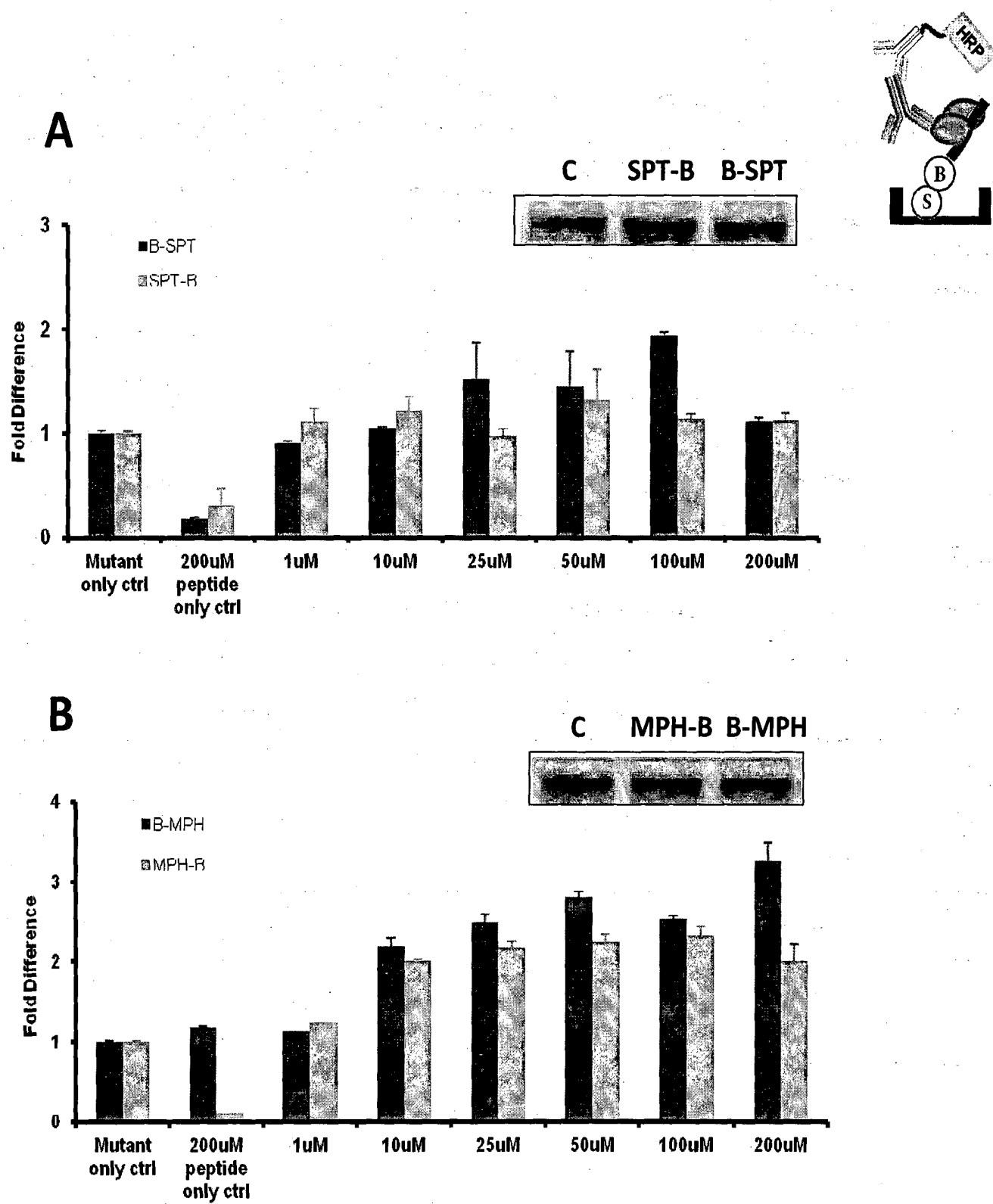
28/ 82

Fig. 16



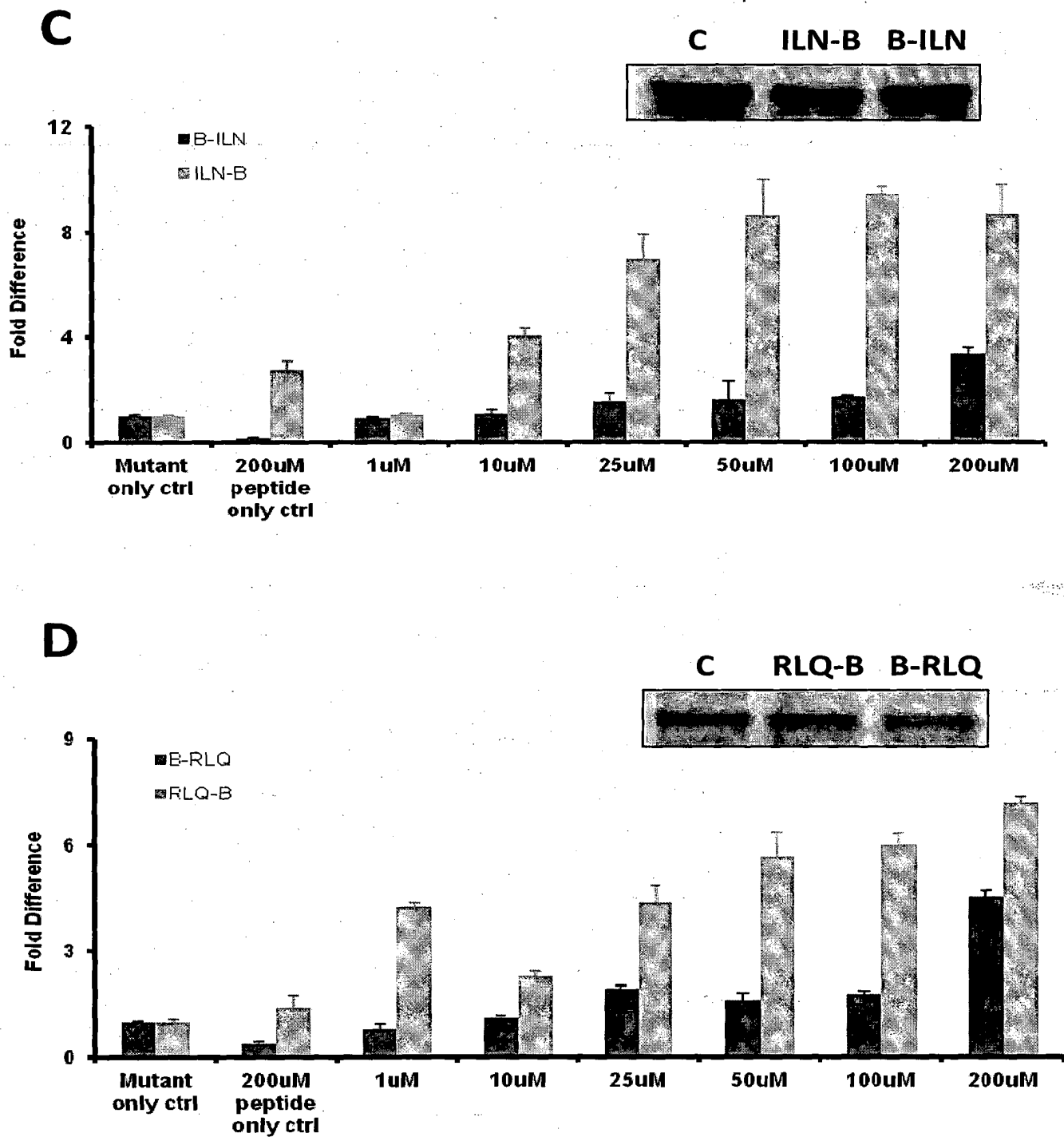
29/ 82

Fig. 17



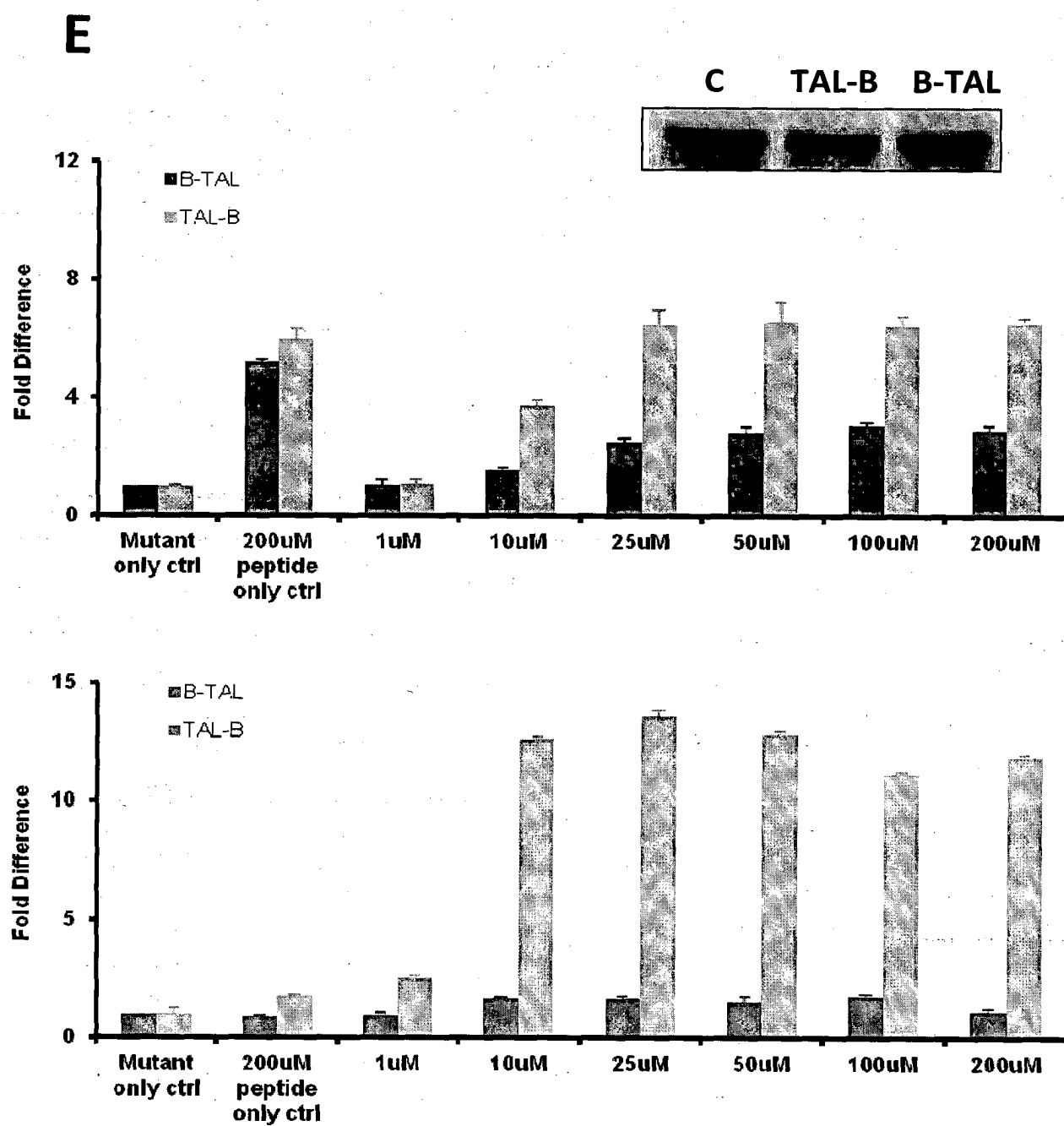
30/ 82

Fig. 17 (continued)



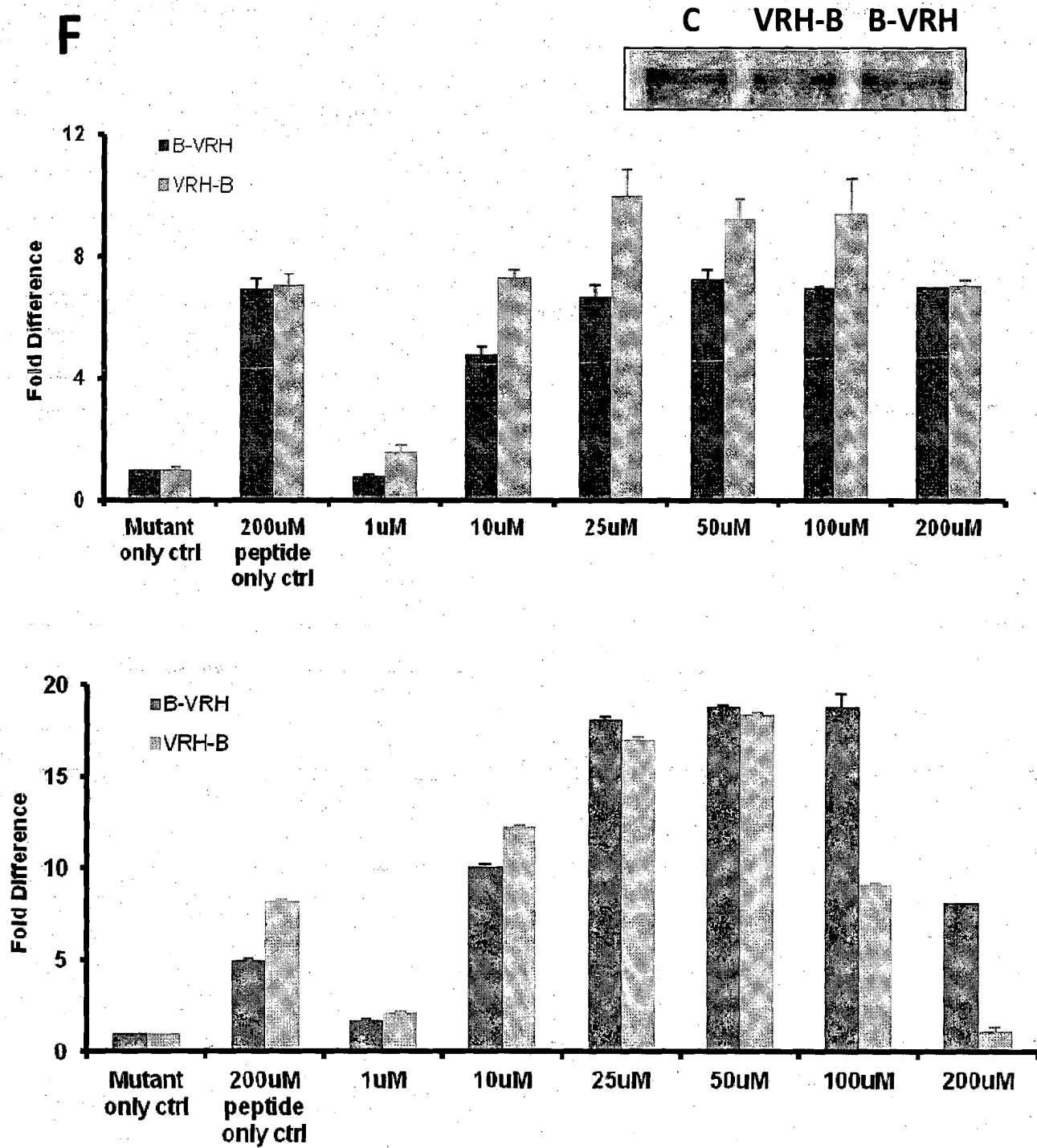
31/82

Fig. 17 (continued)



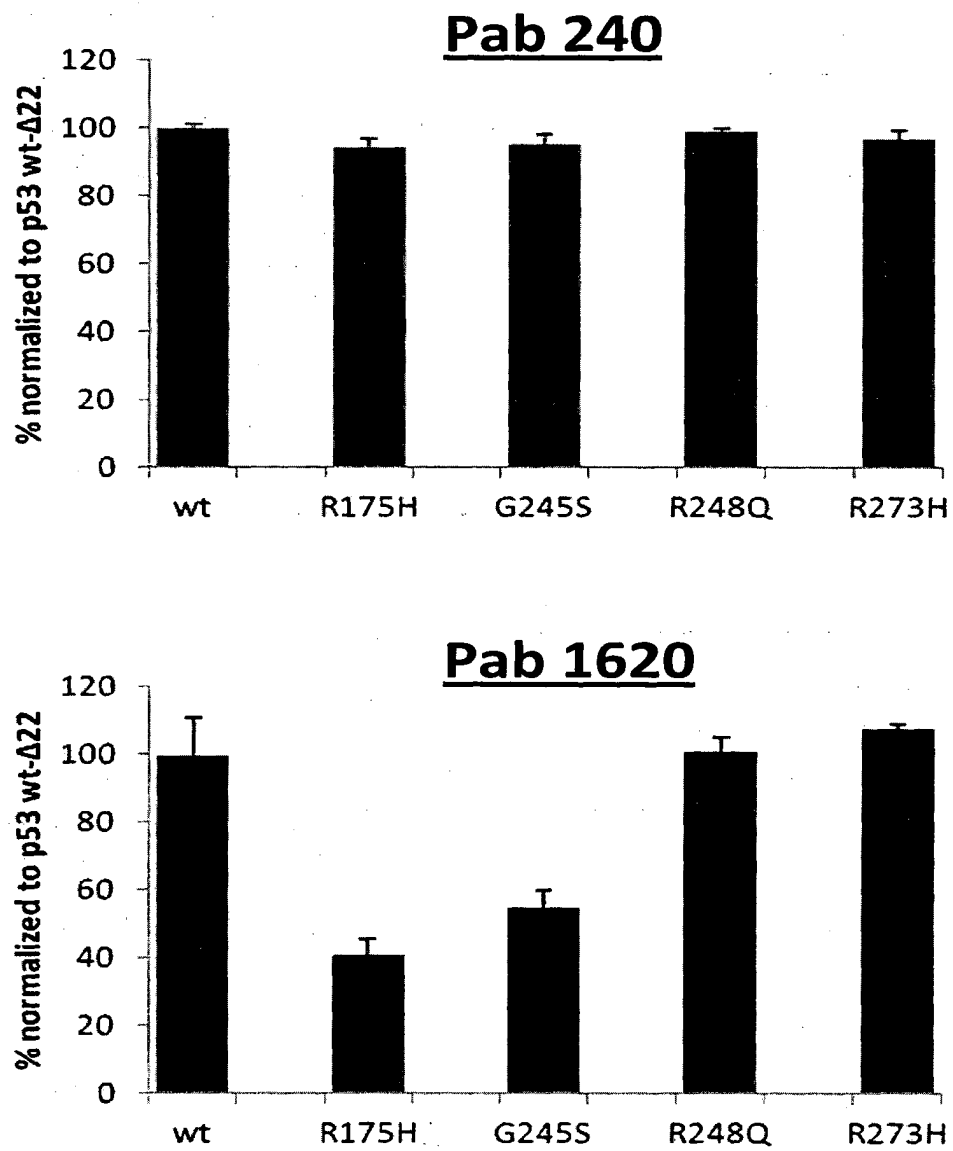
32/ 82

Fig. 17 (continued)



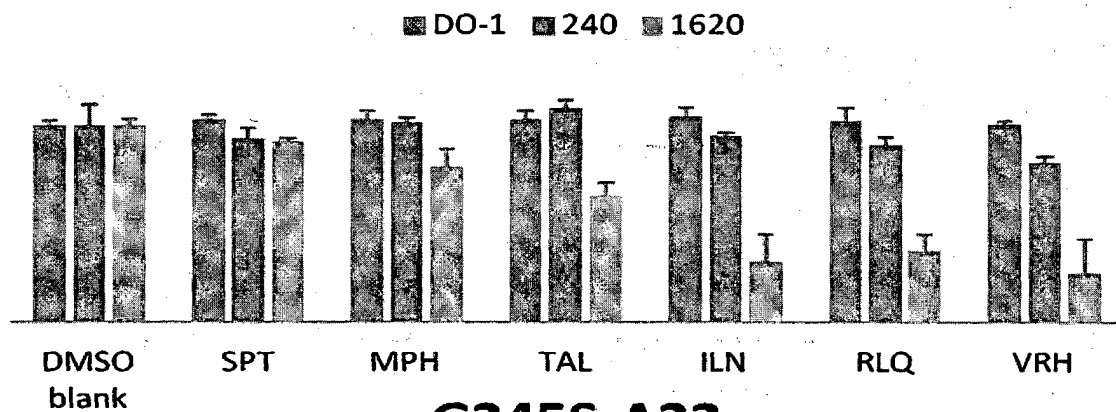
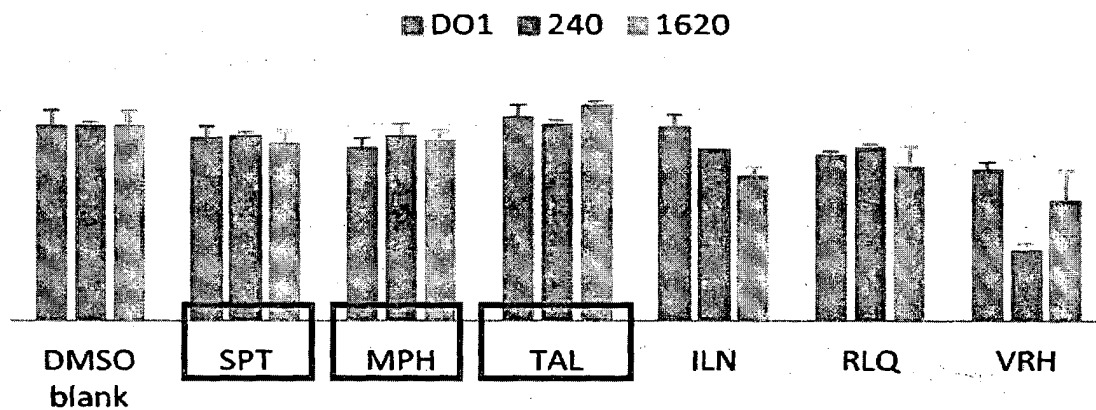
33/ 82

Fig. 18

A

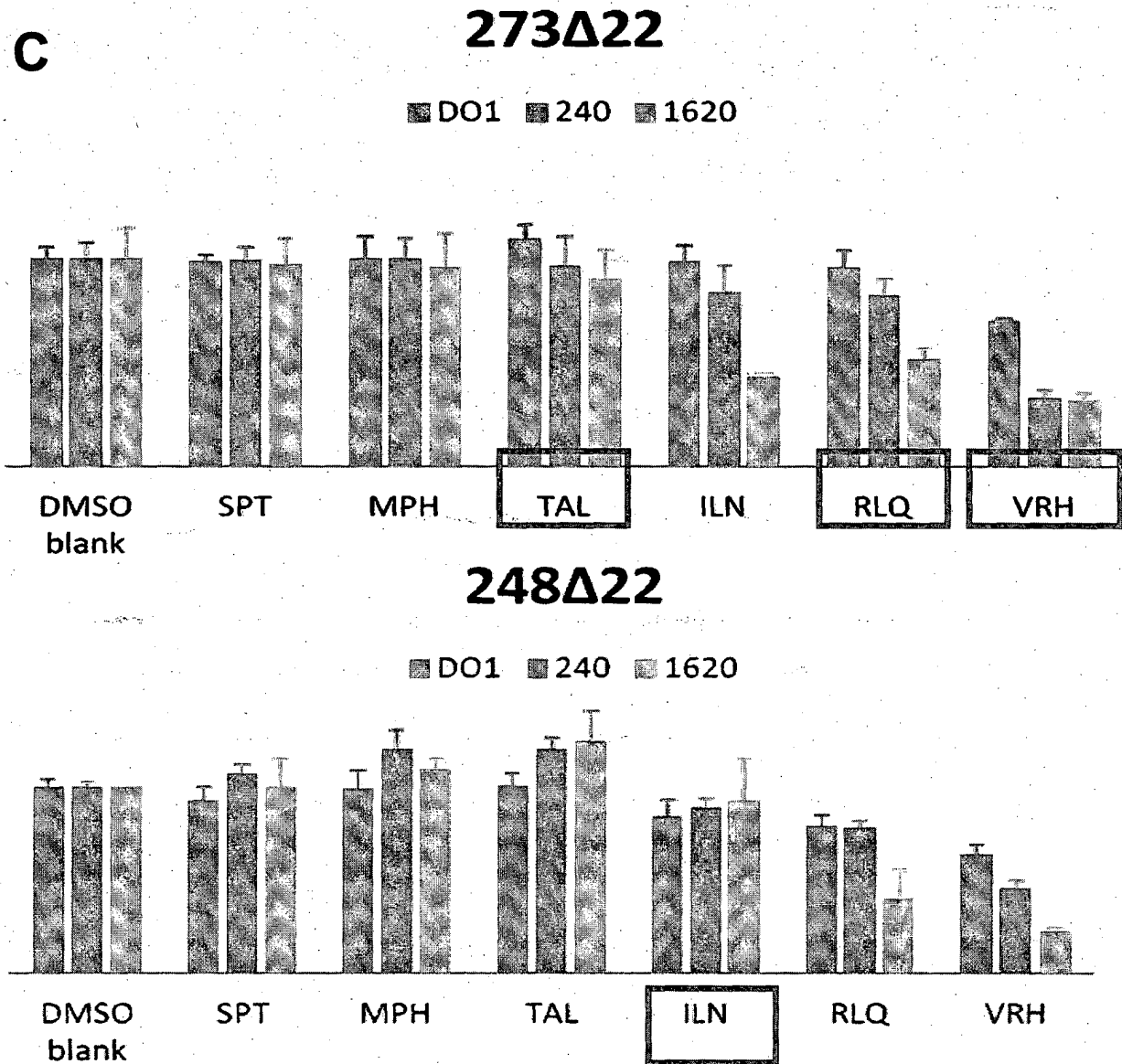
34/ 82

Fig. 18 (continued)

B**wt- $\Delta 22$** **G245S- $\Delta 22$** 

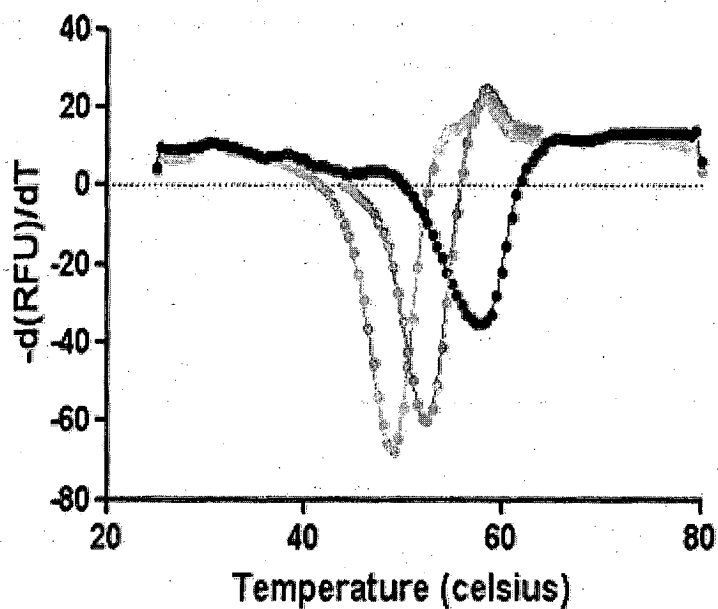
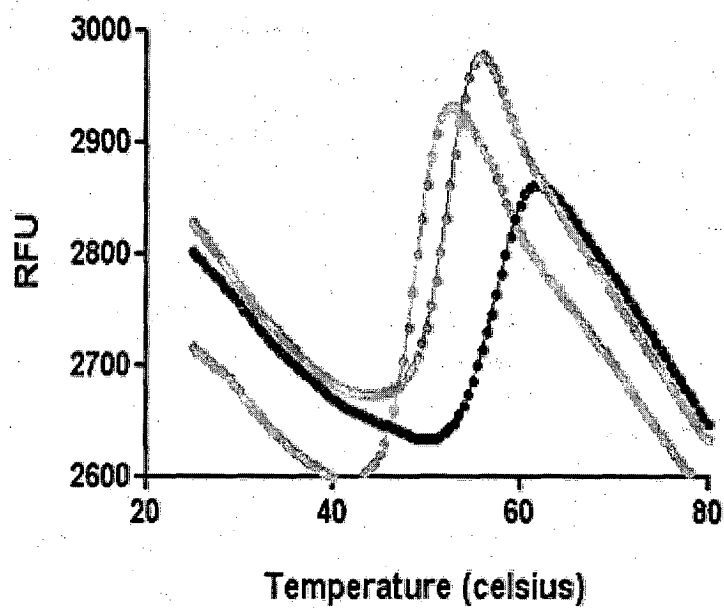
35/82

Fig. 18 (continued)



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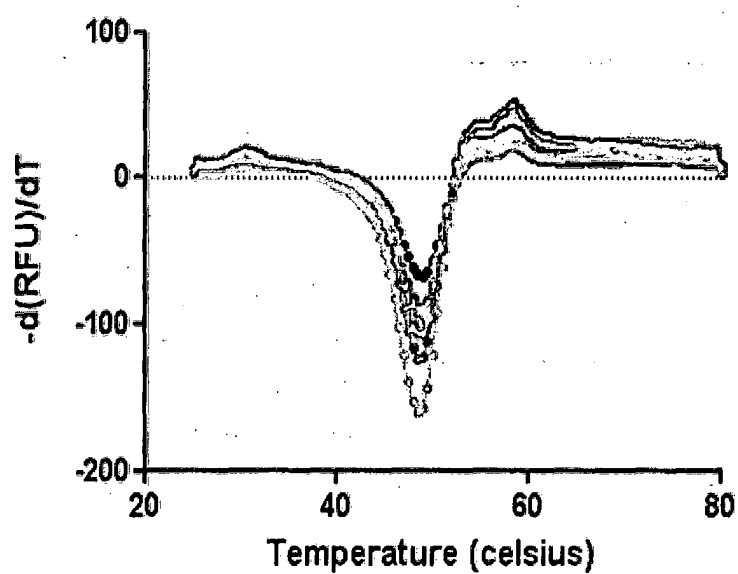
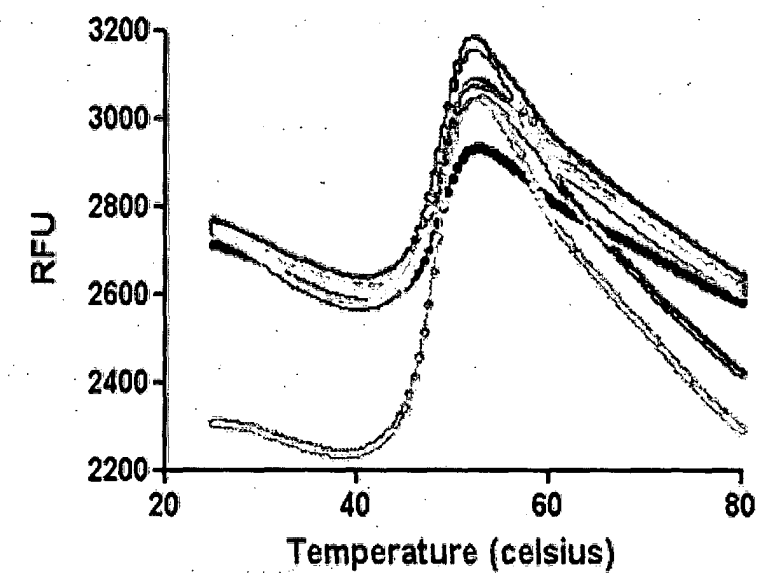
Fig. 19

A

Sample	T _m (°C)
QM-FL	52.90 ± 0.5
QM-FL (p21)	62.95 ± 0.7
QM-FL (Scram)	55.68 ± 0.3

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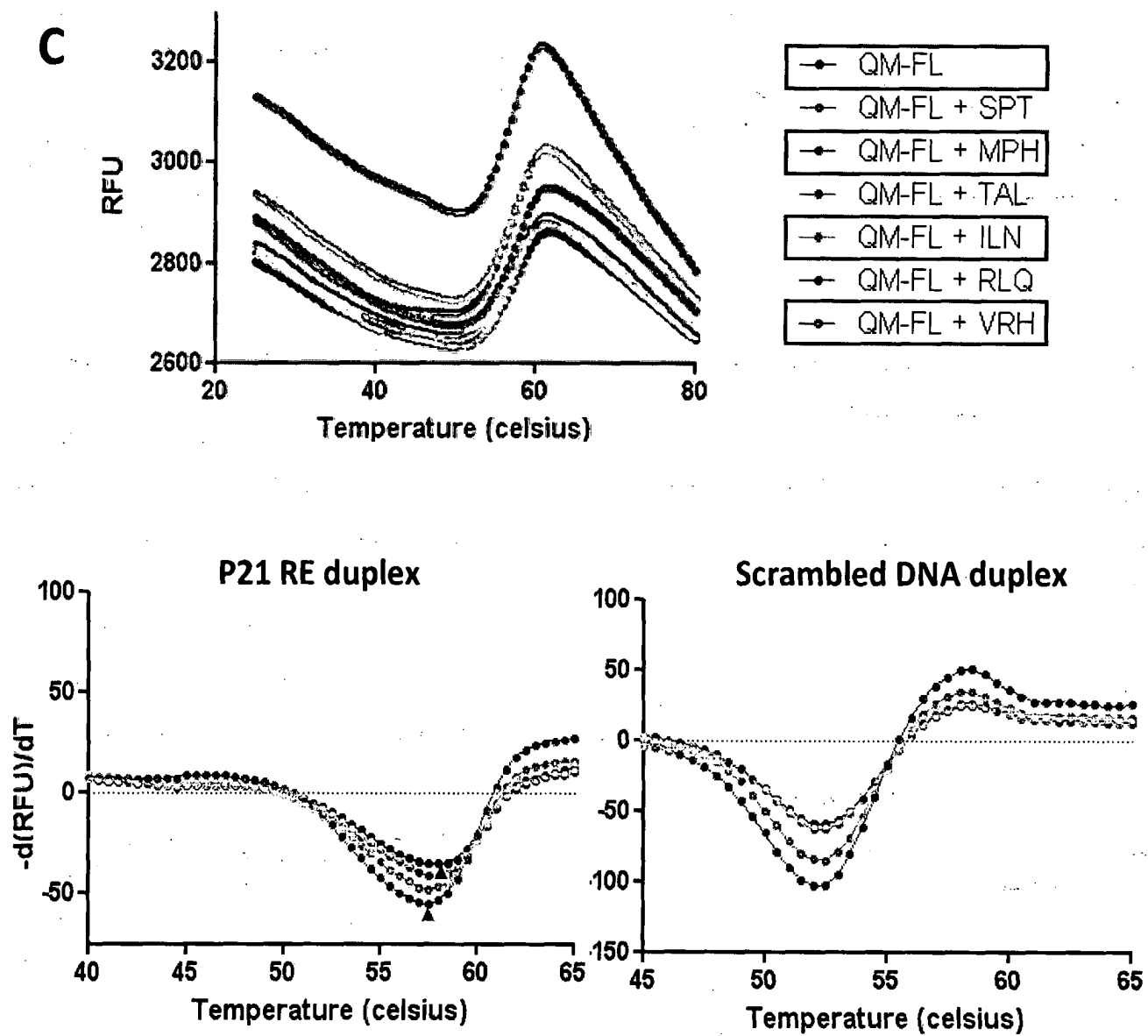
Fig. 19 (continued)

B

Sample	T_m (°C)
QM-FL + DMSO	52.90 ± 0.5
QM-FL + SPT	52.72 ± 0.5
QM-FL + MPH	52.57 ± 0.5
QM-FL + TAL	52.34 ± 0.4
QM-FL + ILN	52.21 ± 0.5
QM-FL + RLQ	52.61 ± 0.5
QM-FL + VRH	52.36 ± 0.4

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Fig. 19 (continued)

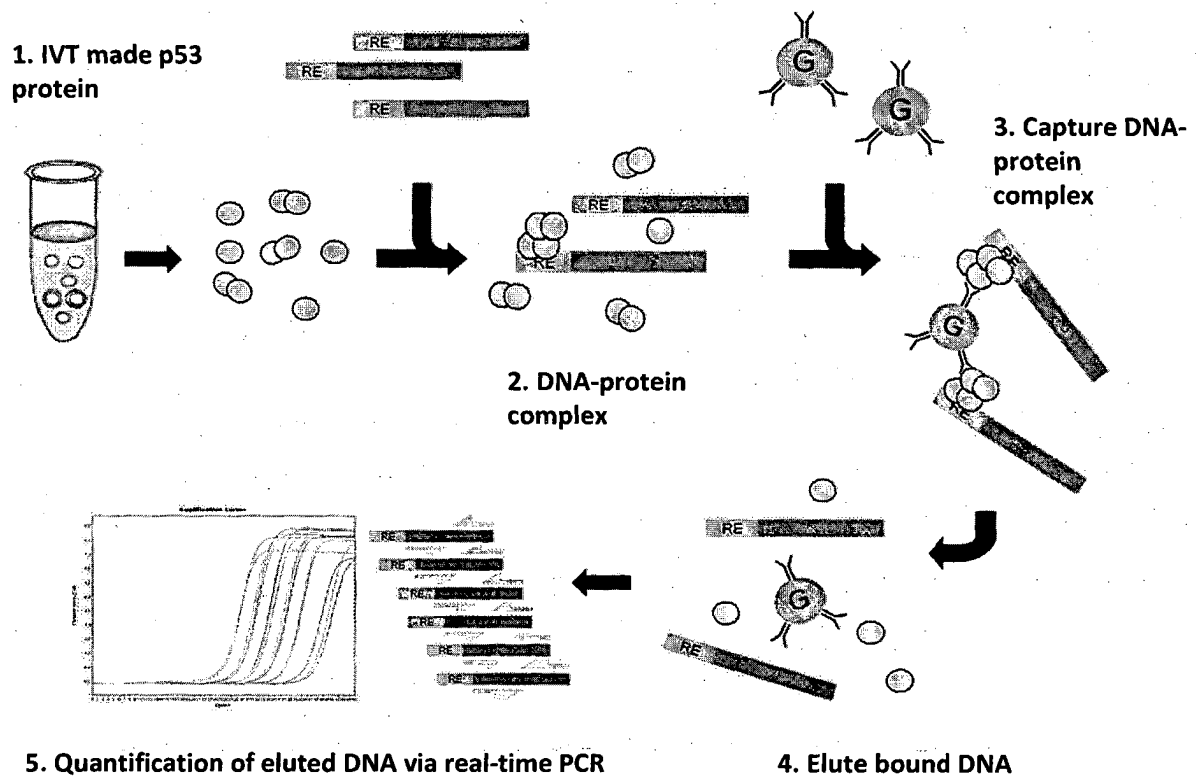


- QM-FL + DMSO blank
- QM-FL + MPH
- QM-FL + ILN
- QM-FL + VRH

Sample	P21-RE T_m (°C)	Scram T_m (°C)
QM-FL + DMSO	62.95 ± 0.5	55.90 ± 0.3
QM-FL + MPH	63.16 ± 0.9	56.06 ± 0.5
QM-FL + ILN	62.10 ± 0.6	55.98 ± 0.3
QM-FL + VRH	61.56 ± 0.4	55.73 ± 0.4

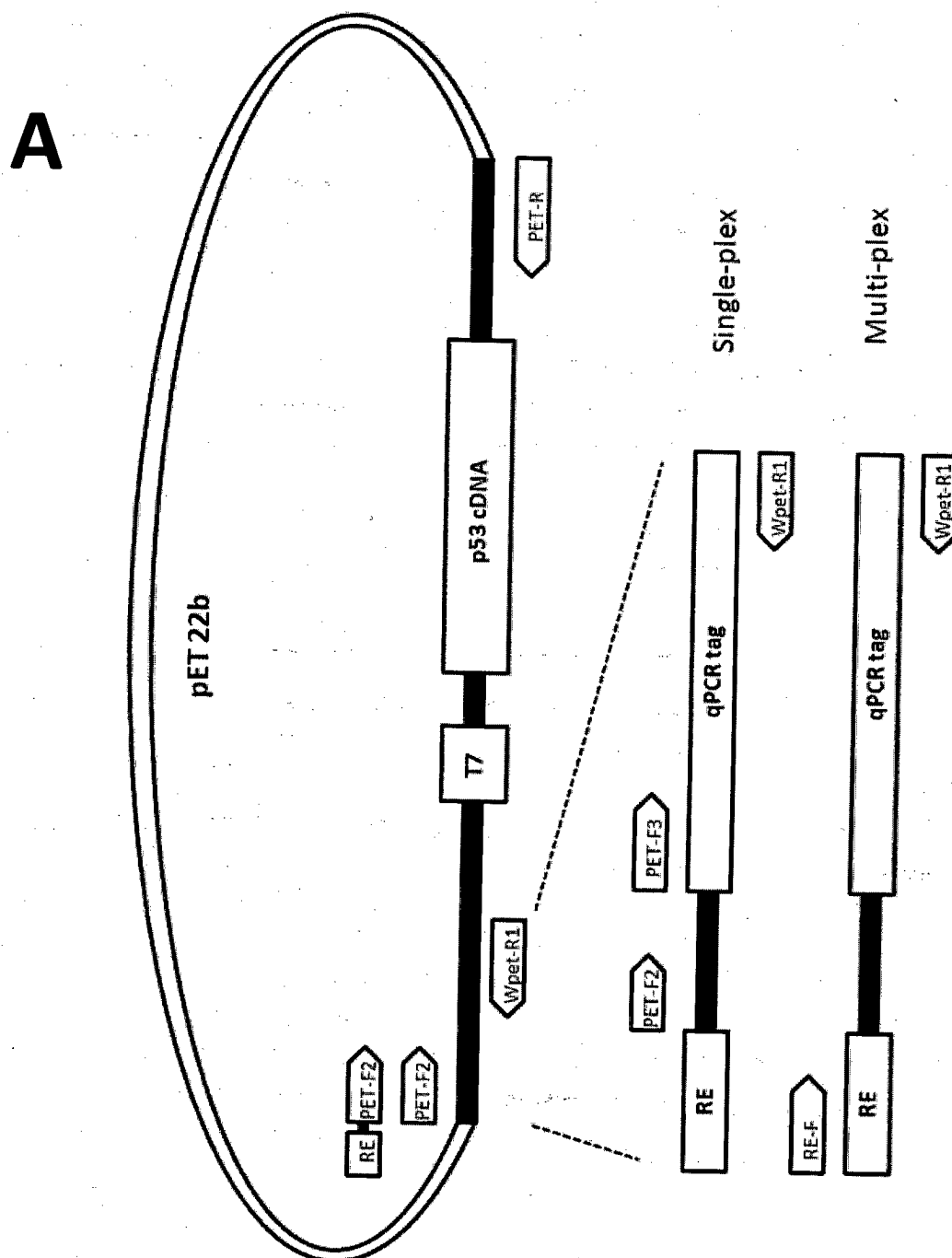
39/ 82

Fig. 20



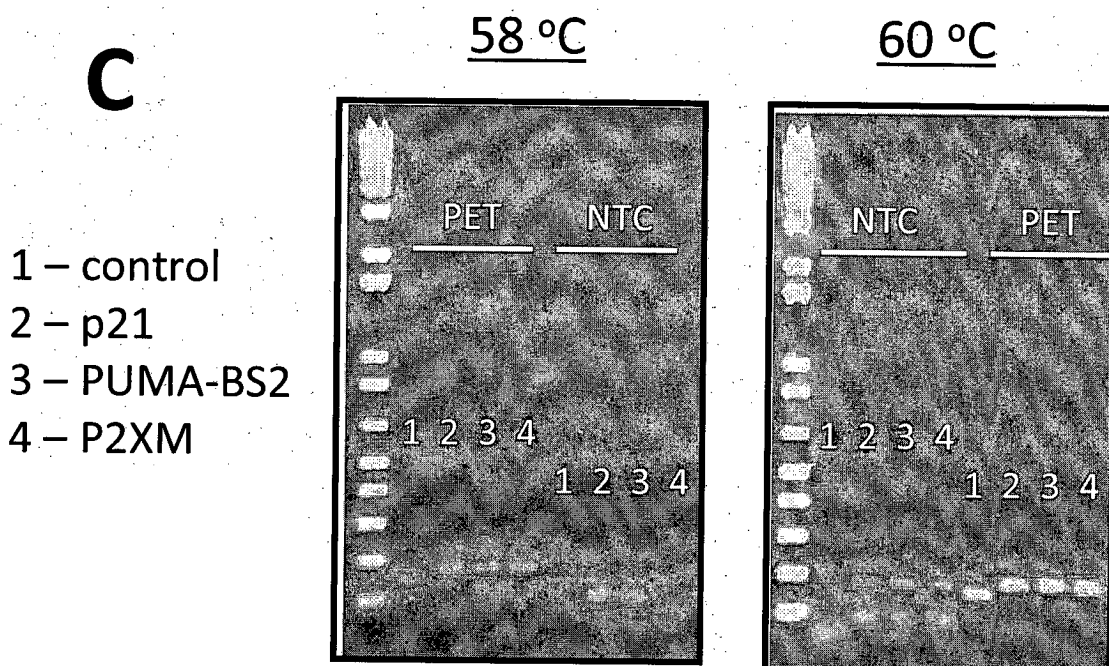
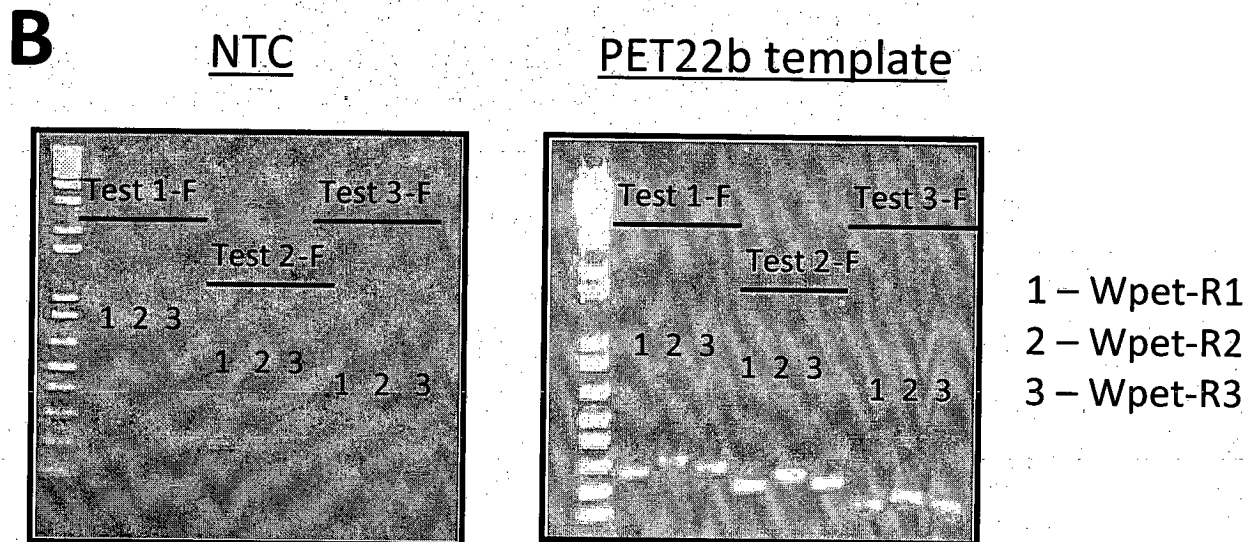
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Fig. 21



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Fig. 21 (continued)



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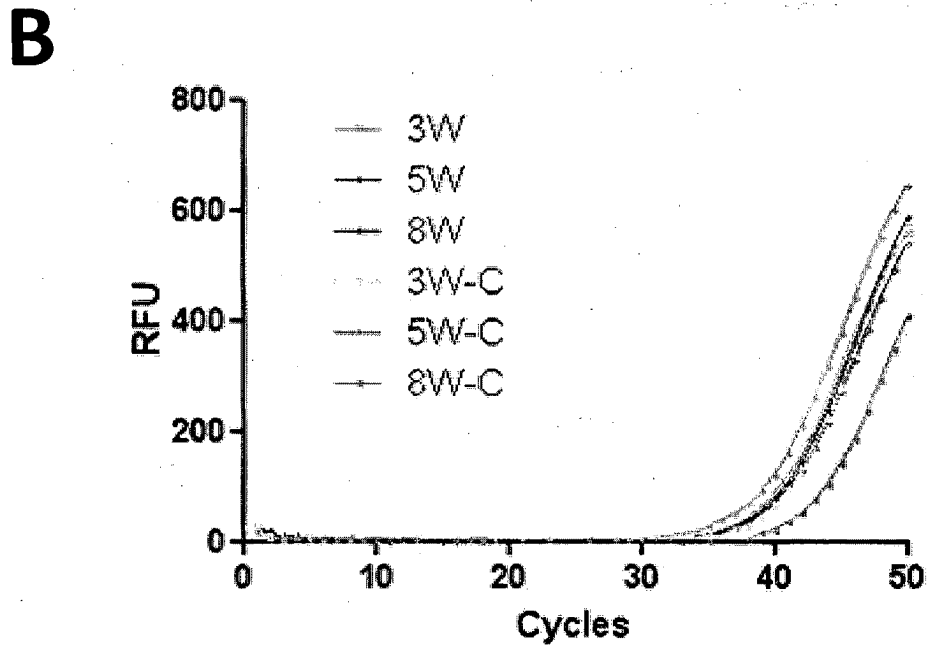
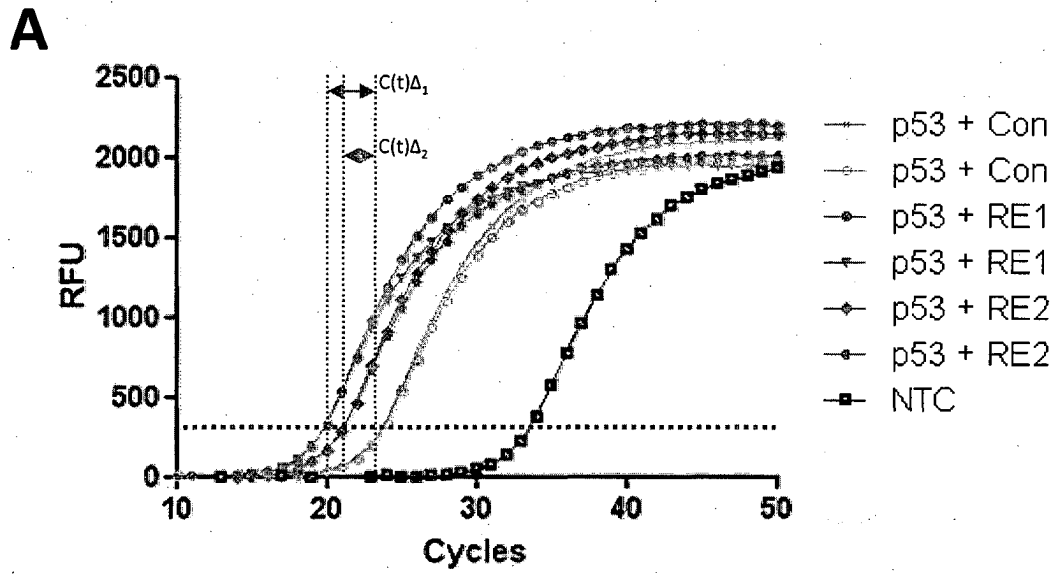
Fig. 21 (continued)**D**

- 1 – control
- 2 – RGC
- 3 – p21
- 4 – PUMA-BS2
- 5 – P2XM



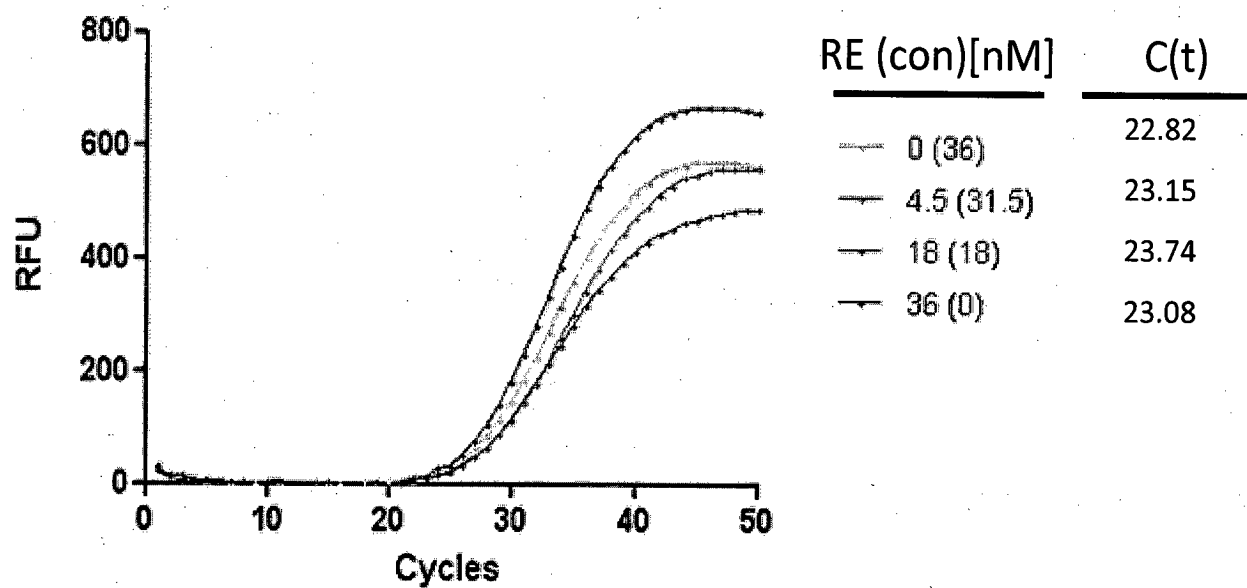
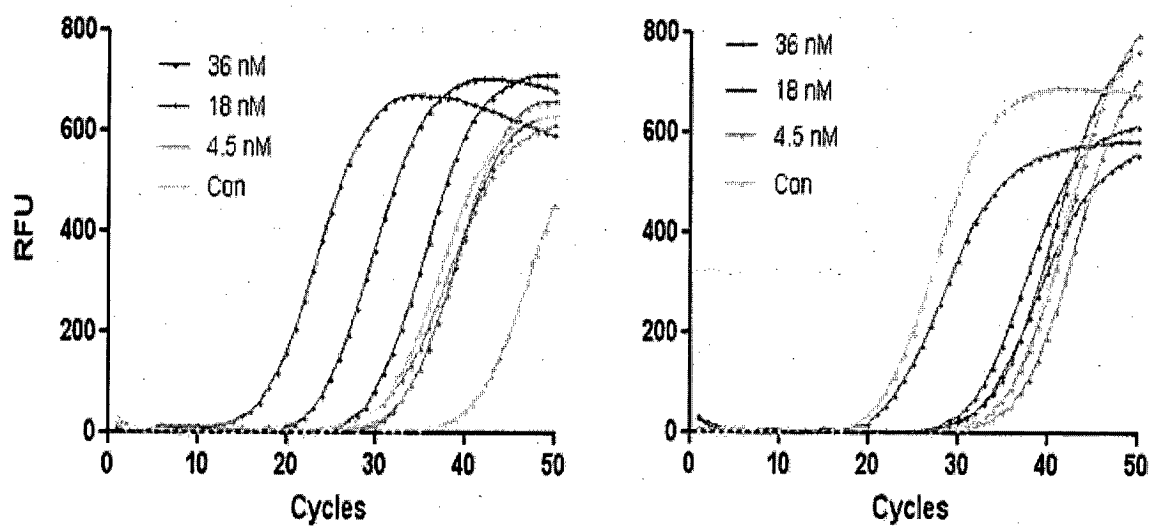
43/ 82

Fig. 22



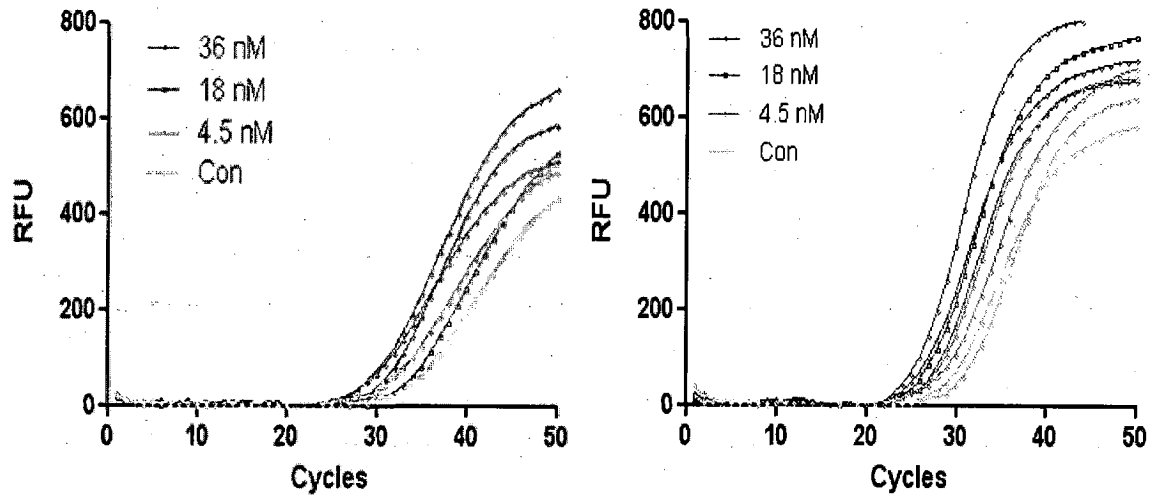
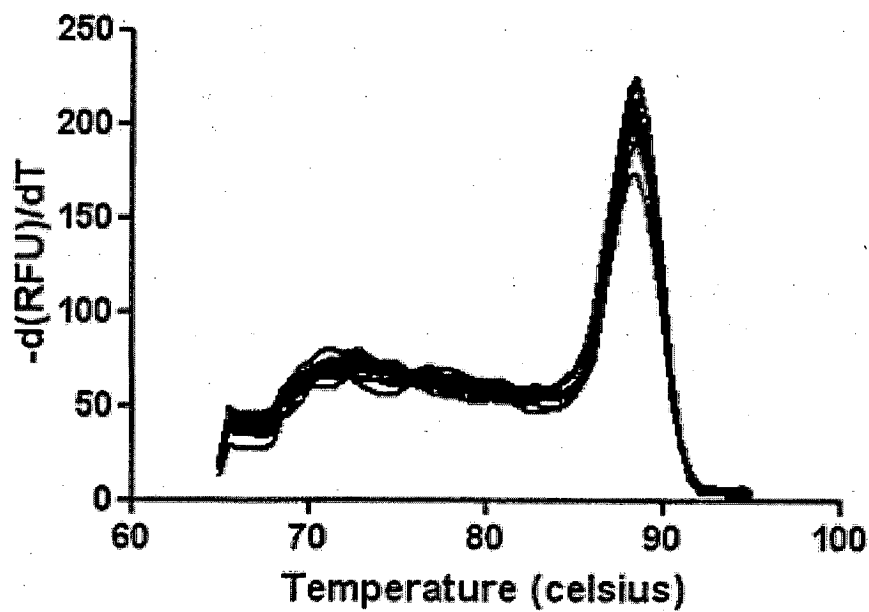
44/ 82

Fig. 22 (continued)

C**D**

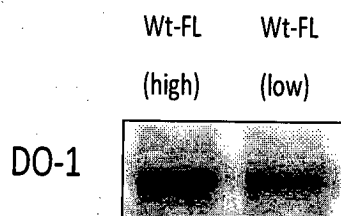
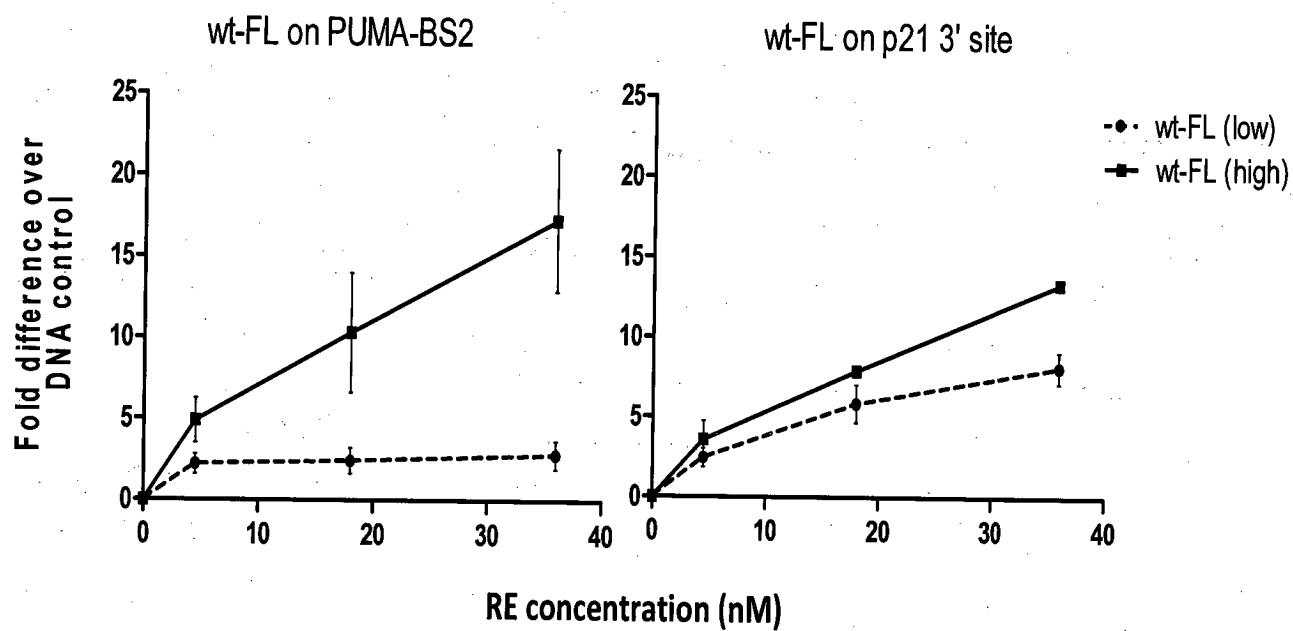
45/ 82

Fig. 22 (continued)

E**F**

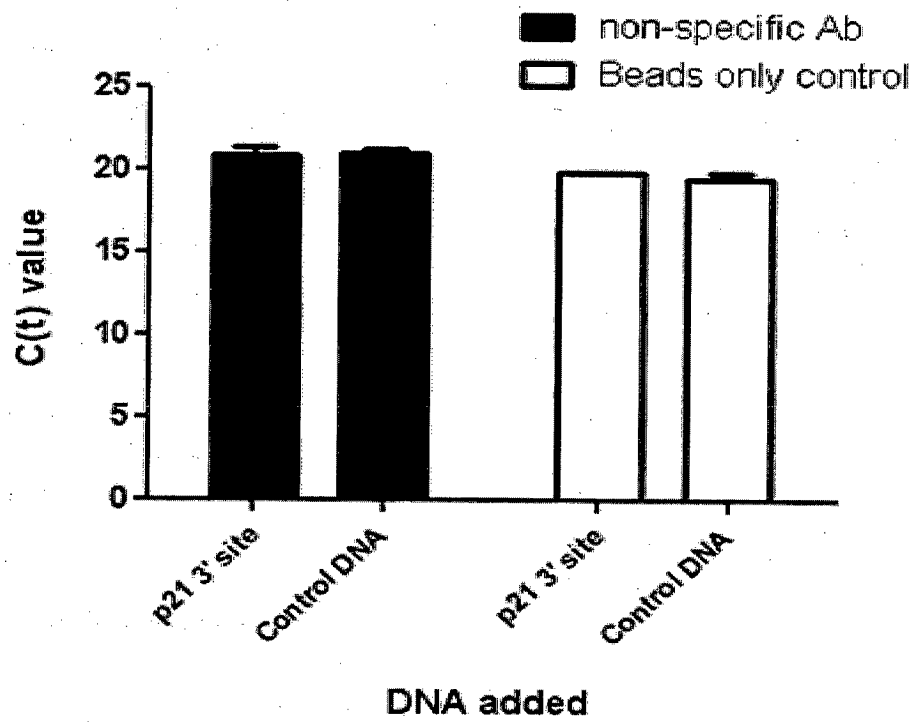
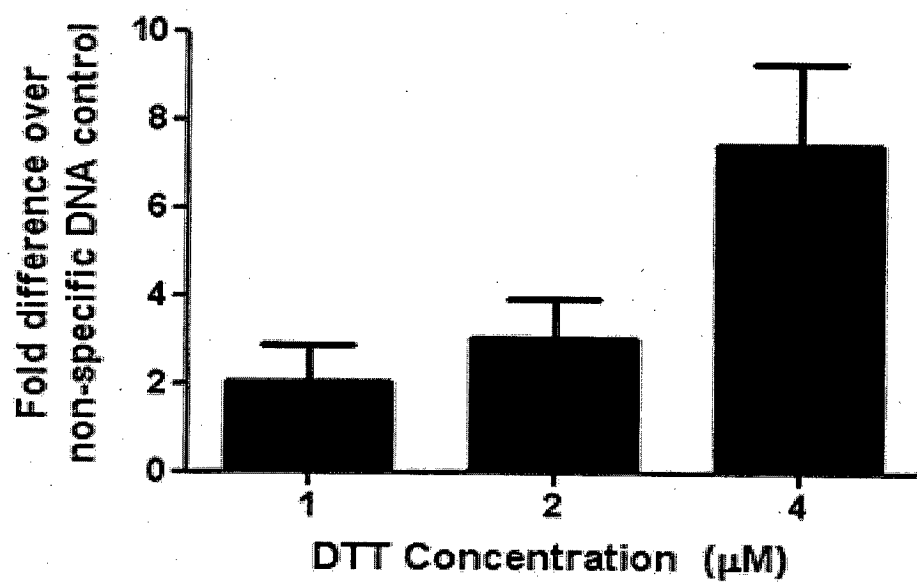
46/ 82

Fig. 23



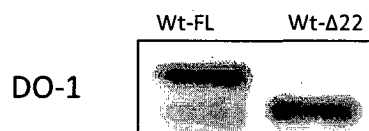
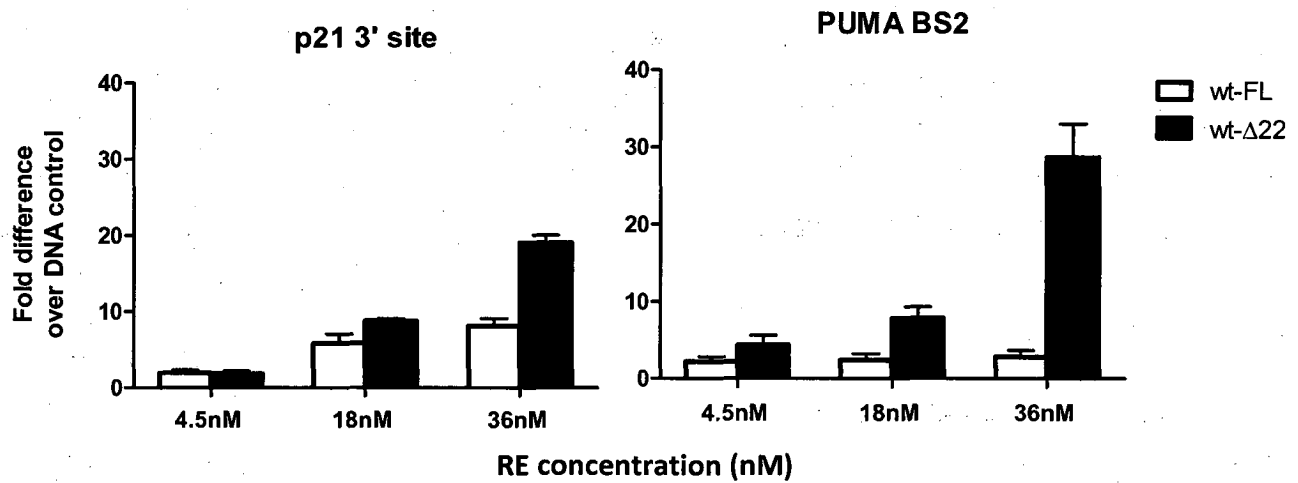
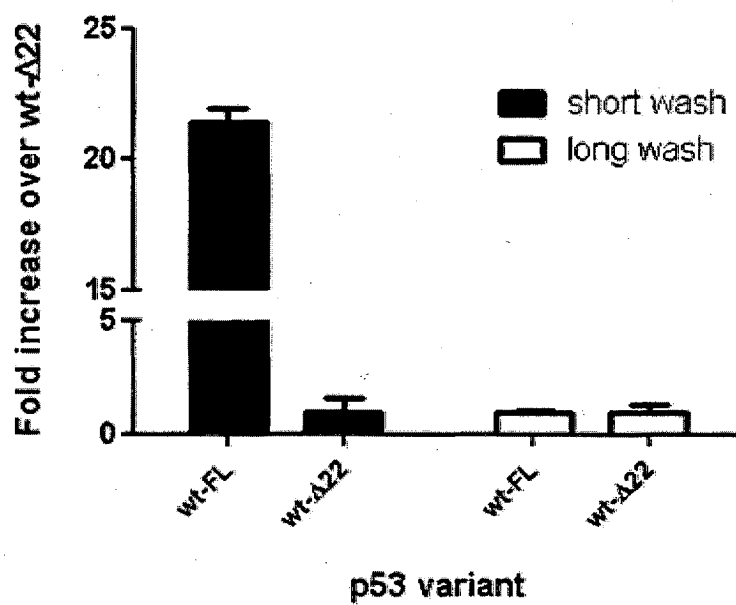
47/ 82

Fig. 24

A**B**

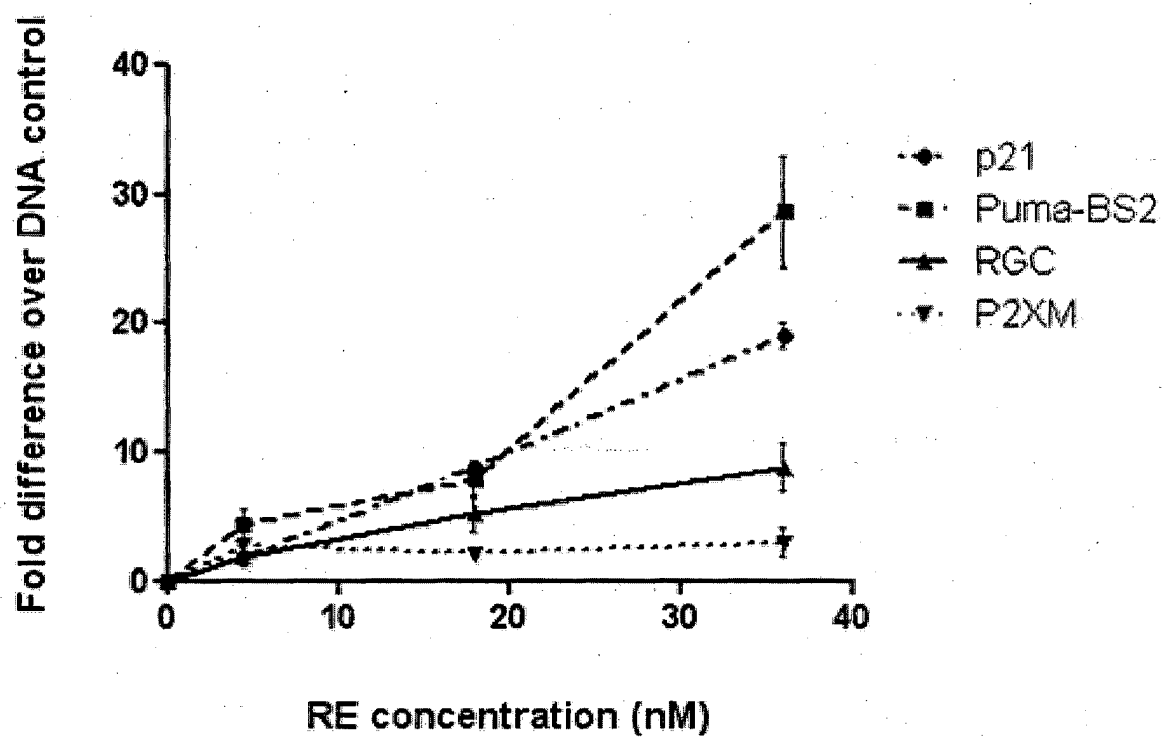
48/ 82

Fig. 25

A**B**

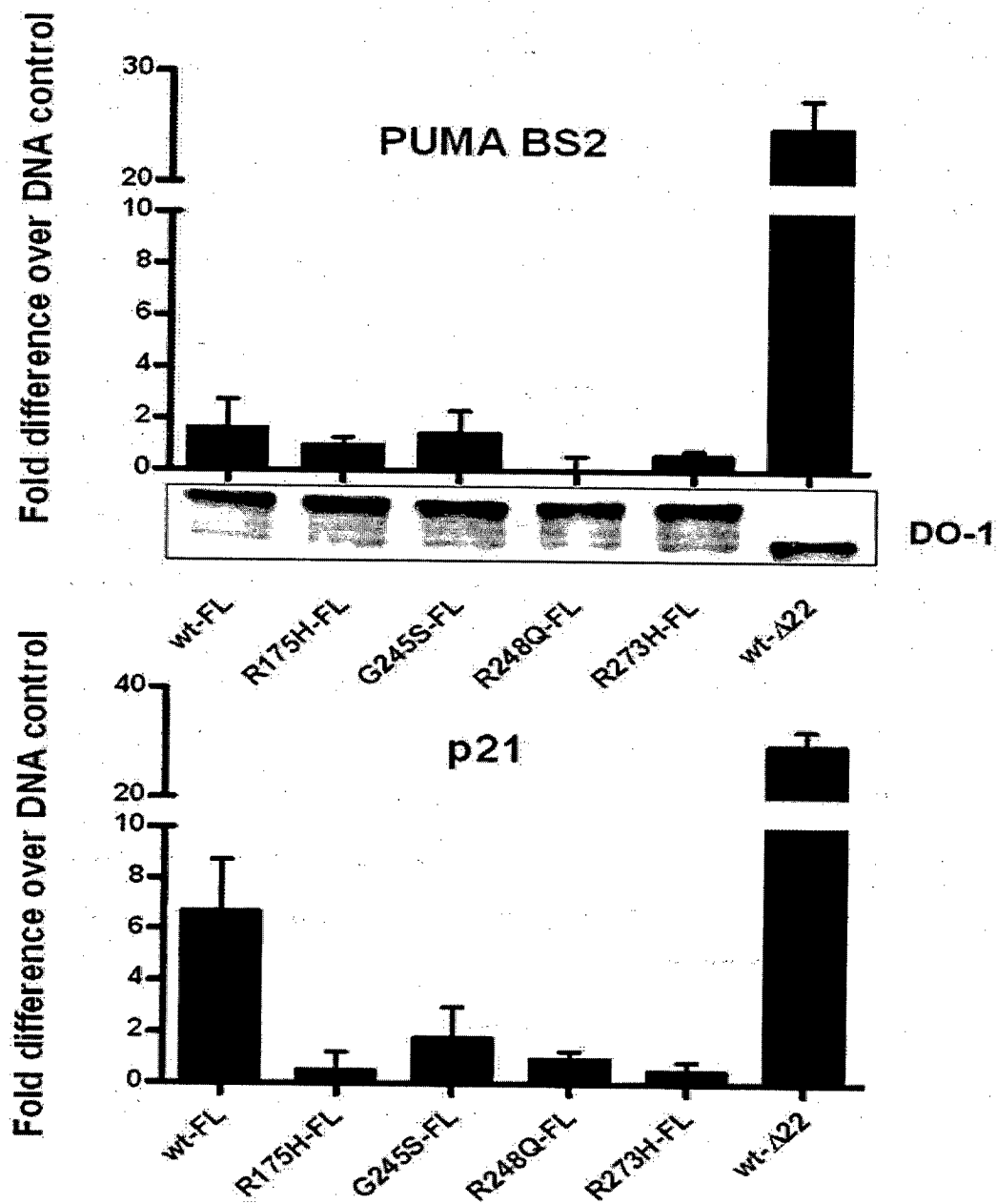
49/ 82

Fig. 26



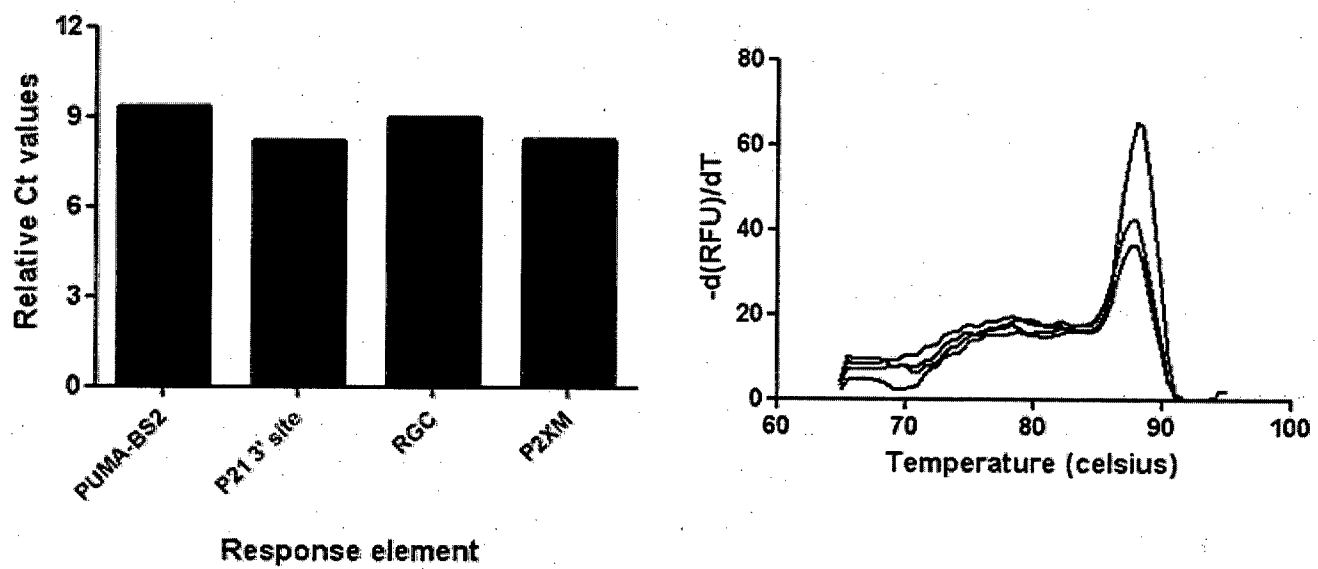
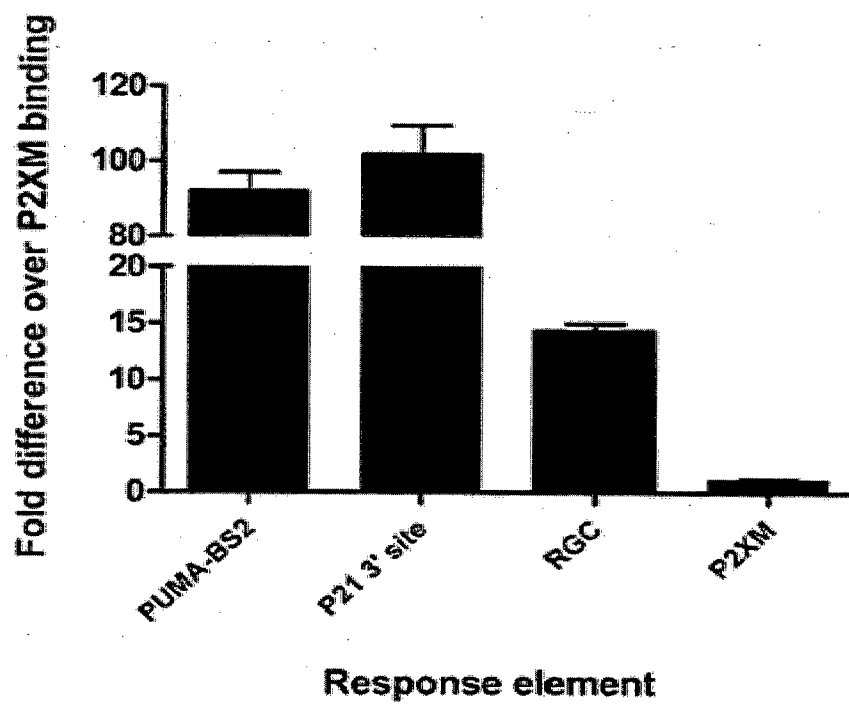
50/ 82

Fig. 27



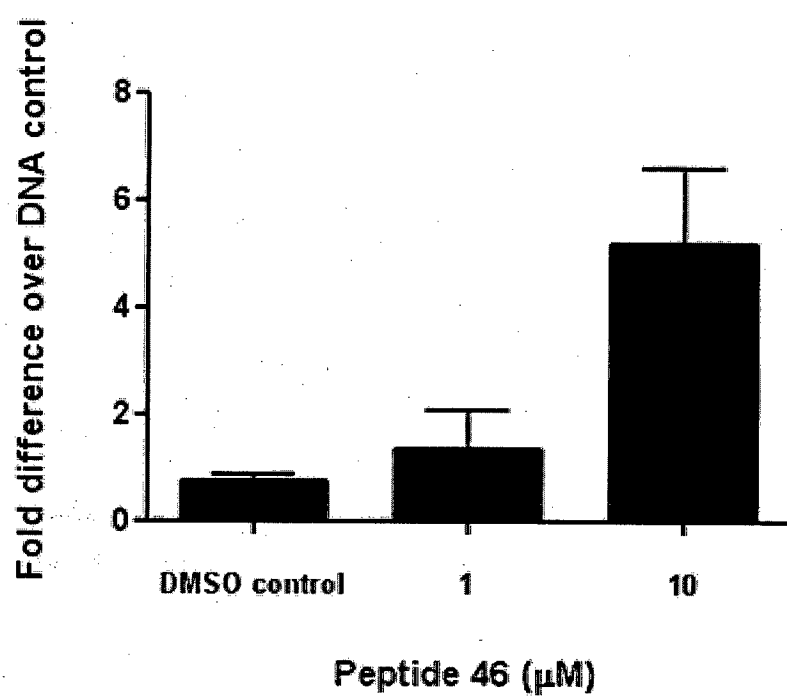
51/ 82

Fig. 28

A**B**

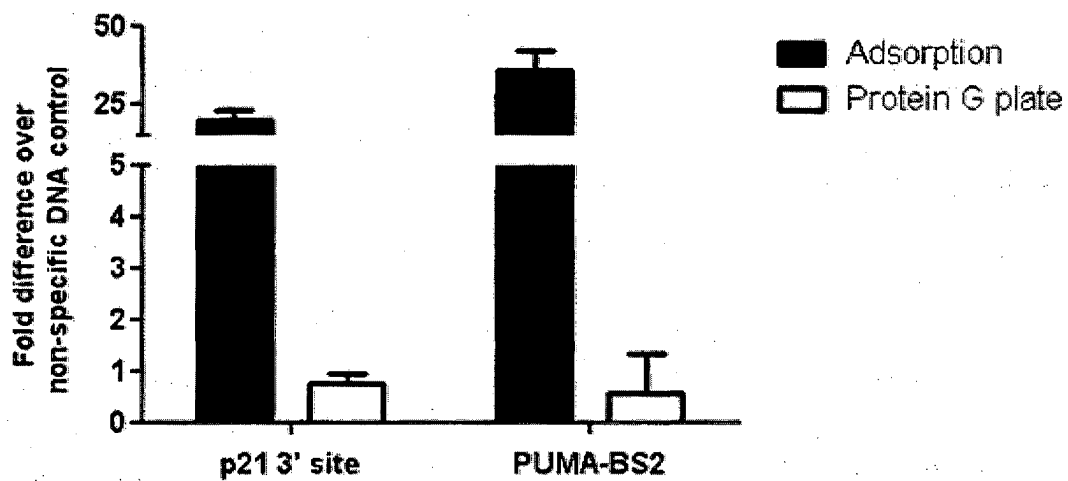
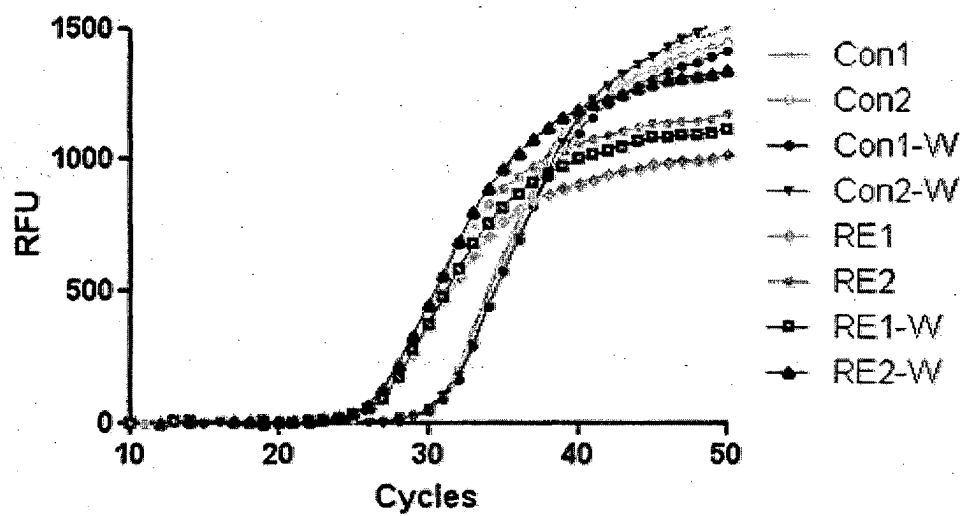
52/ 82

Fig. 29



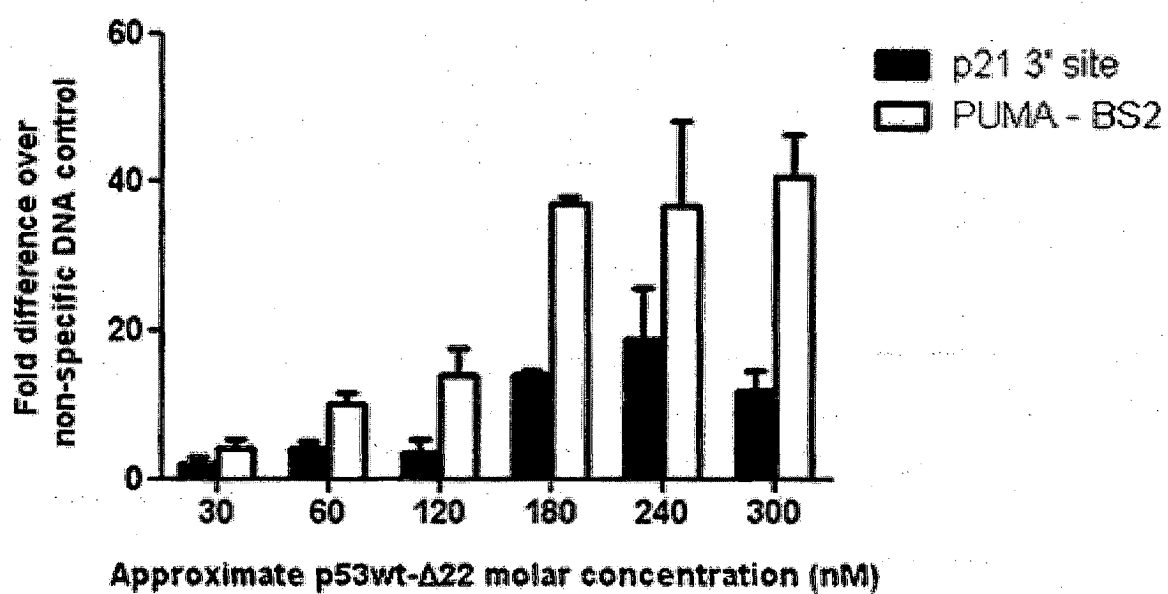
53/ 82

Fig. 30

A**B**

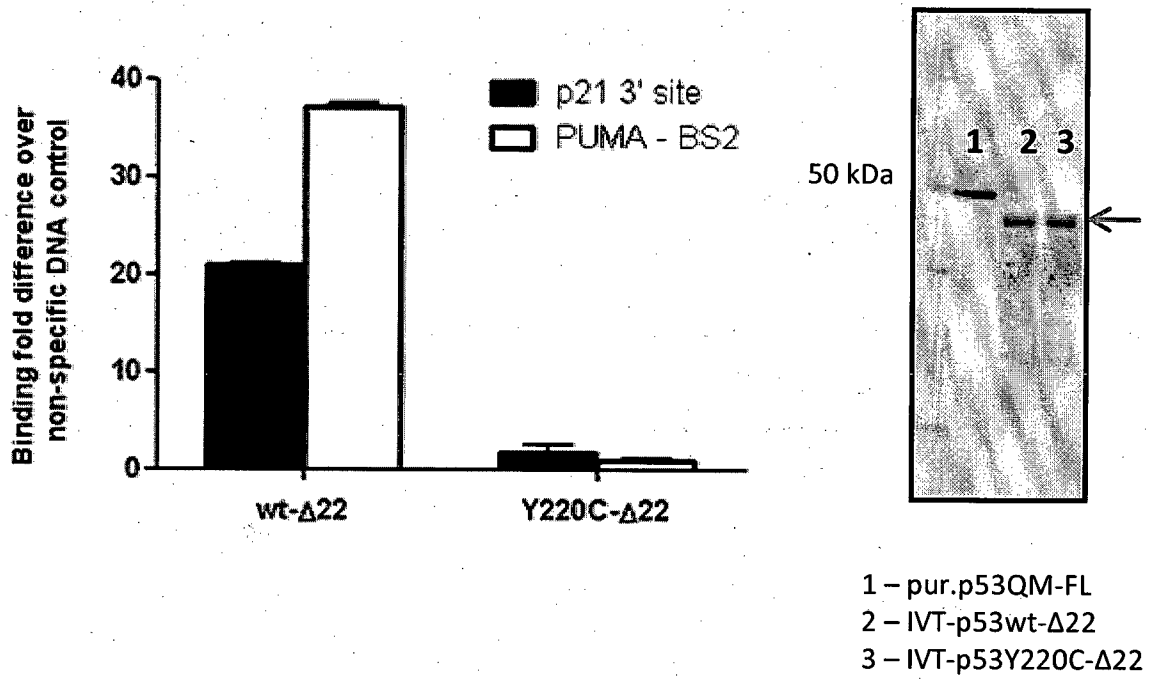
54/82

Fig. 31



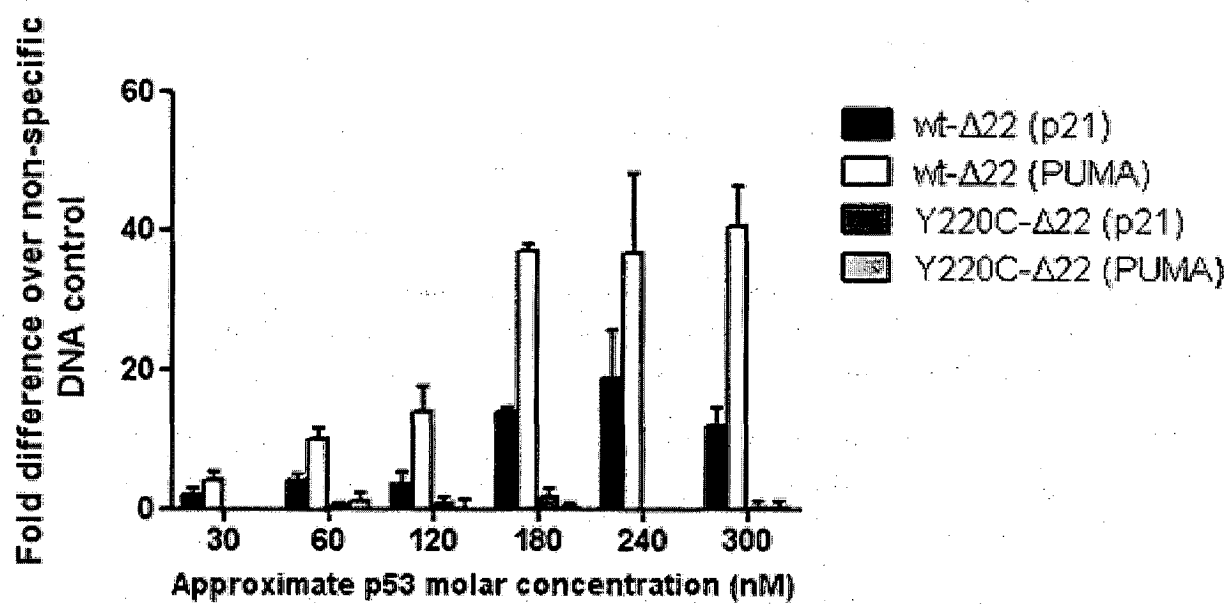
55/ 82

Fig. 32

A

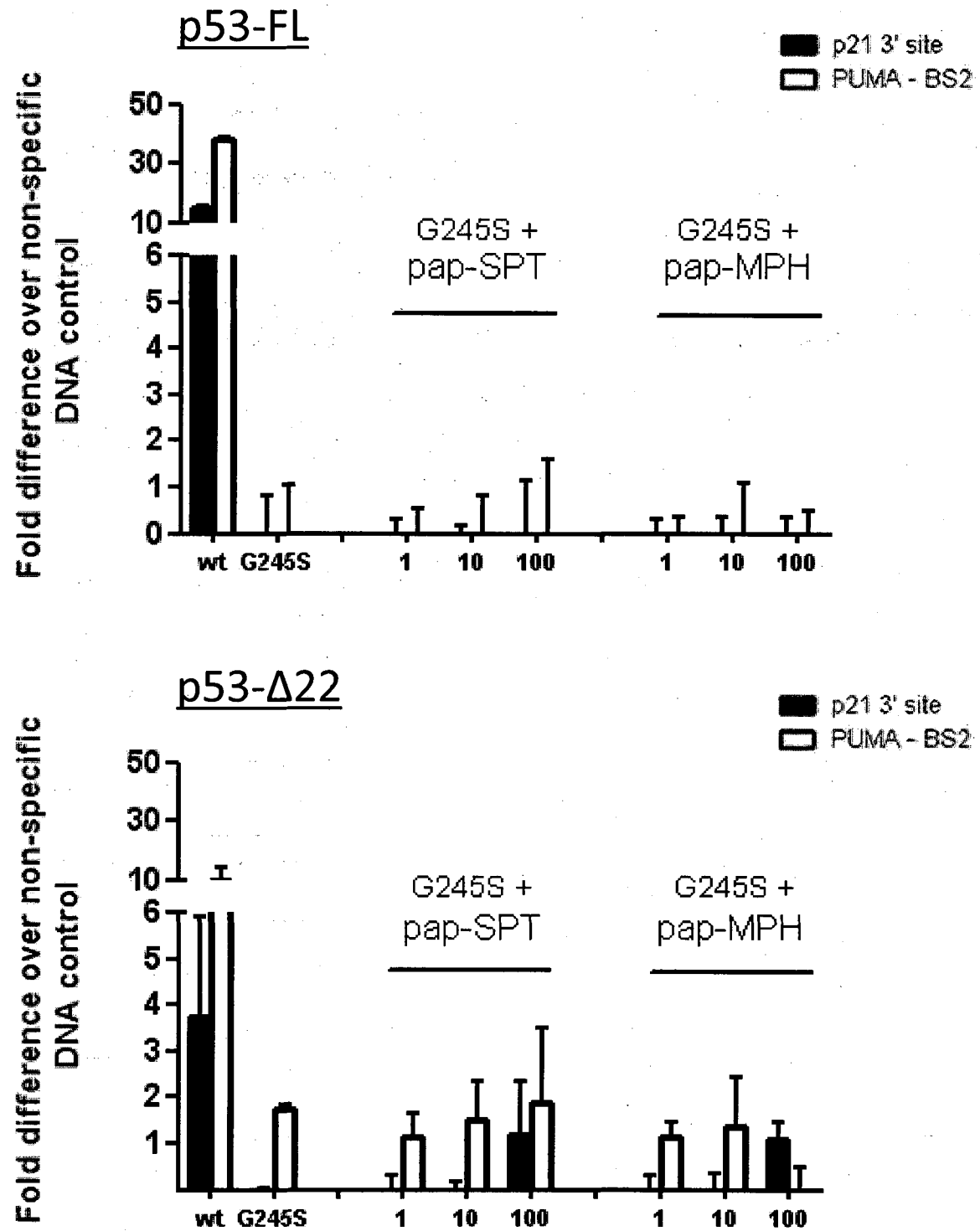
56/ 82

Fig. 32 (continued)

B

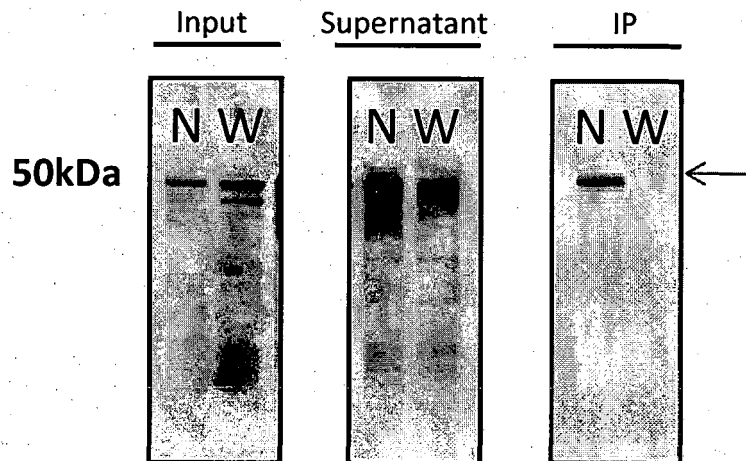
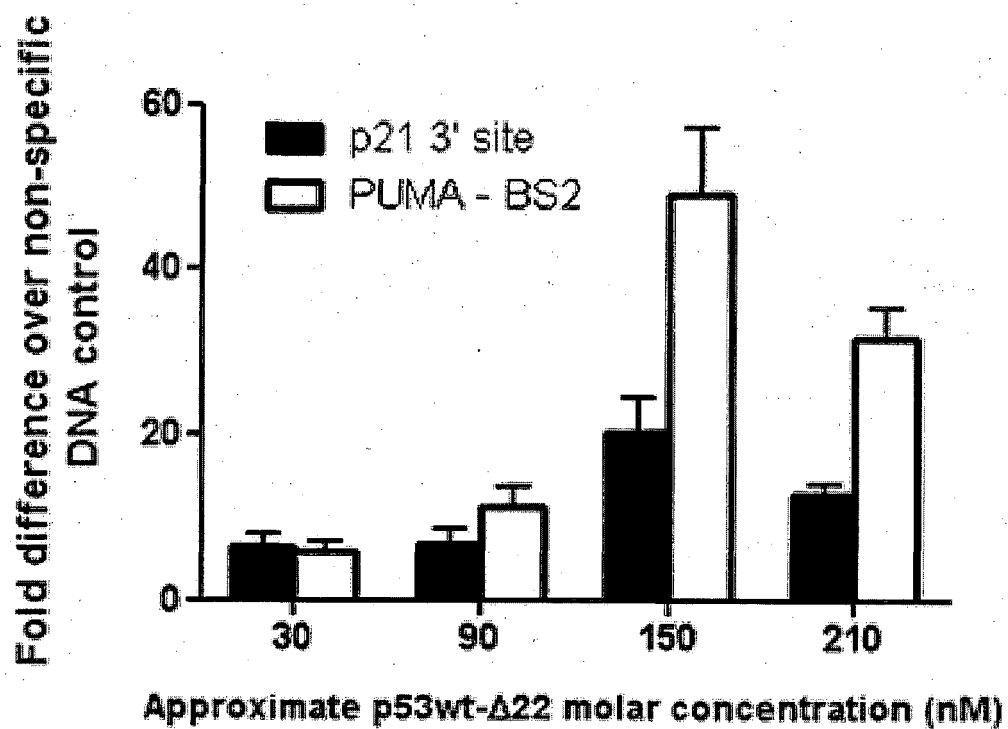
57/ 82

Fig. 33

A

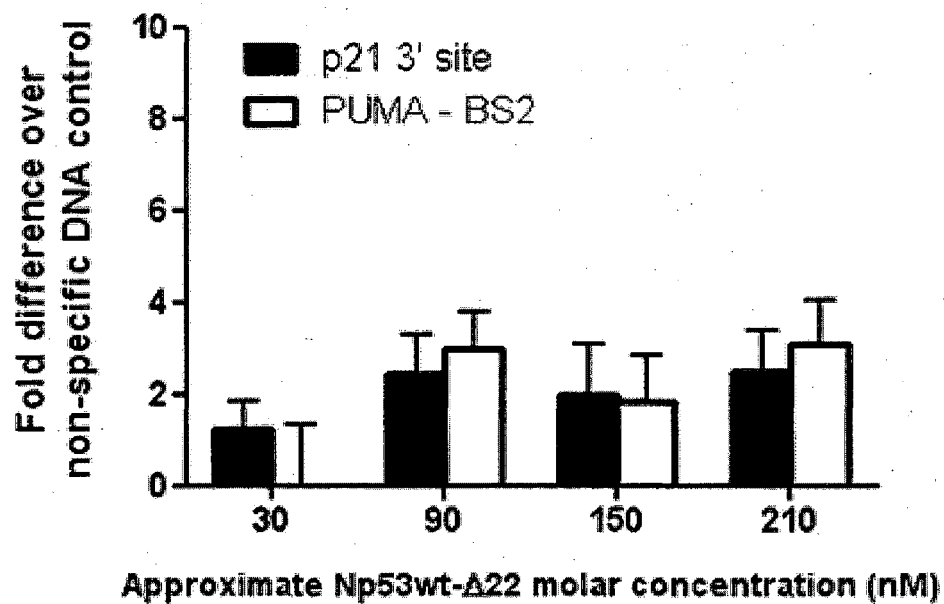
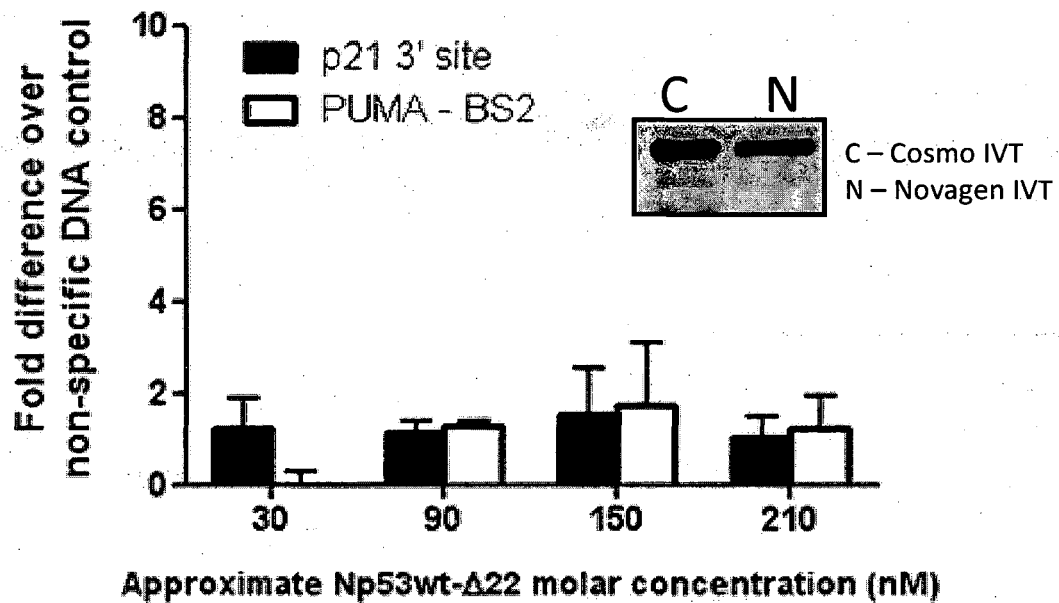
58/ 82

Fig. 34

A**B**

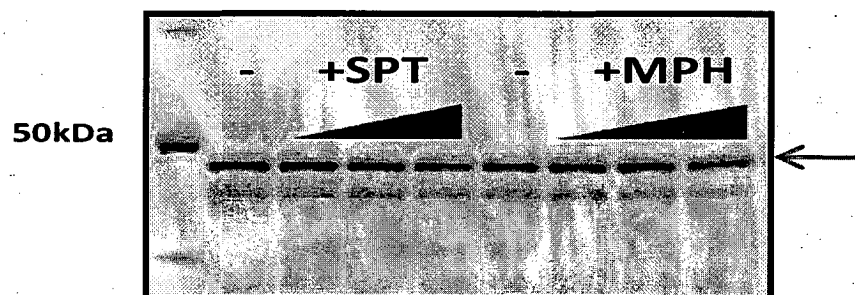
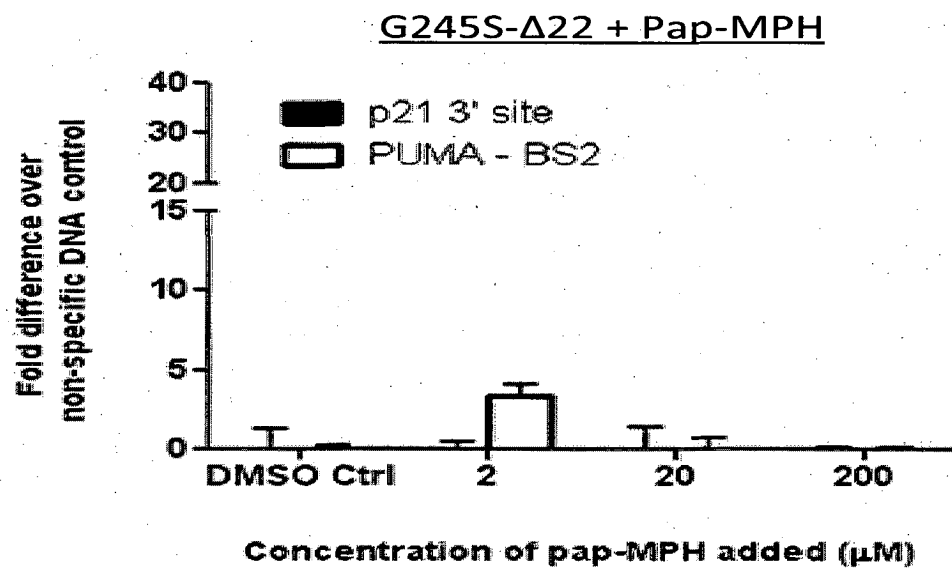
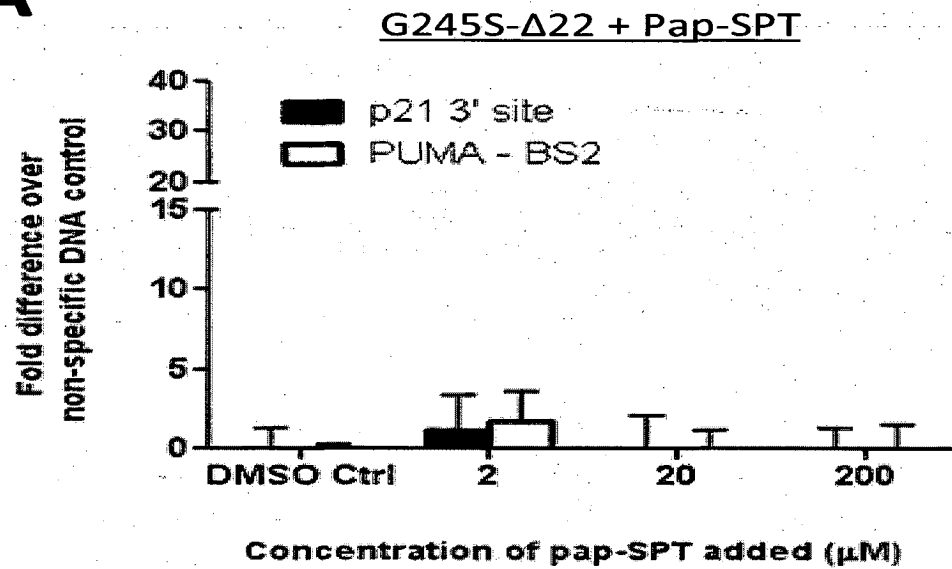
59/ 82

Fig. 35

A

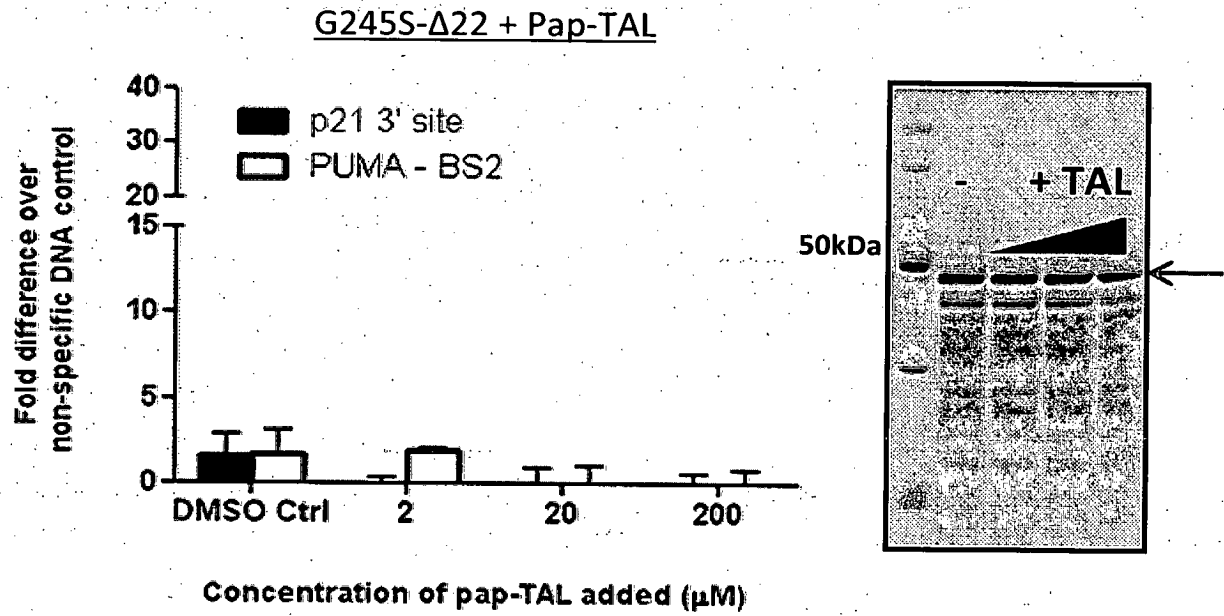
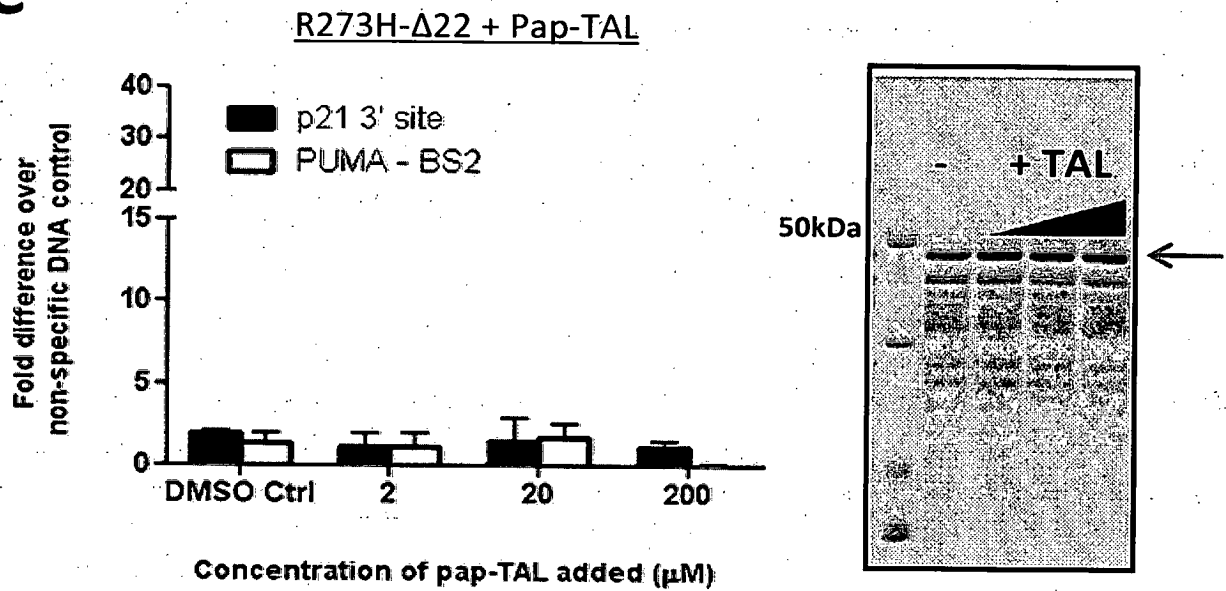
60/ 82

Fig. 36

A

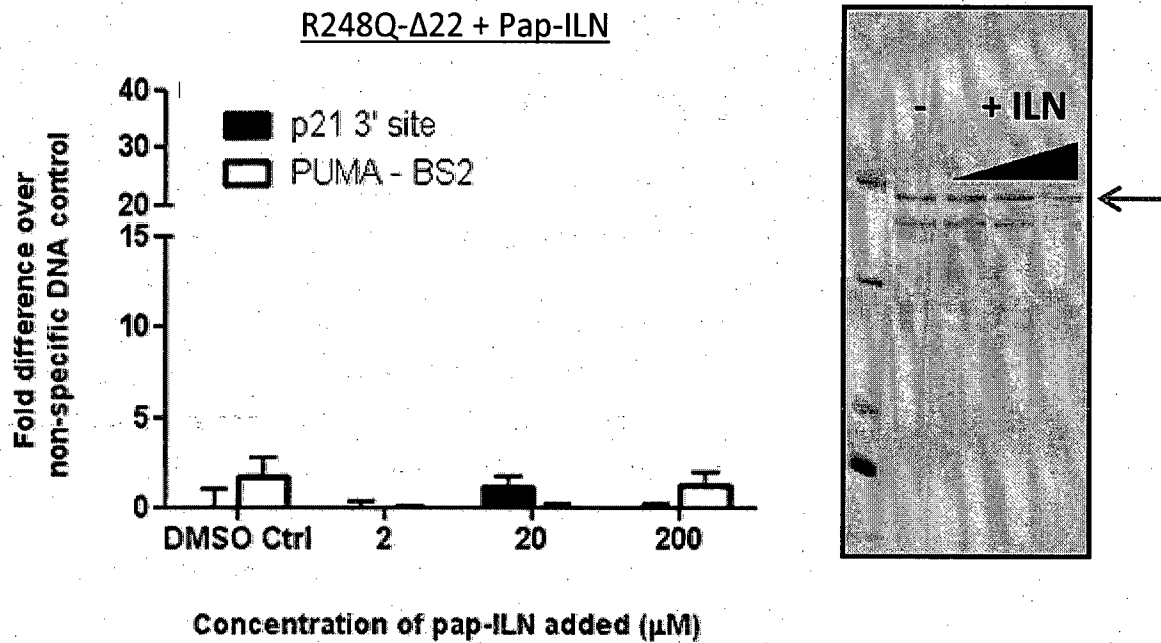
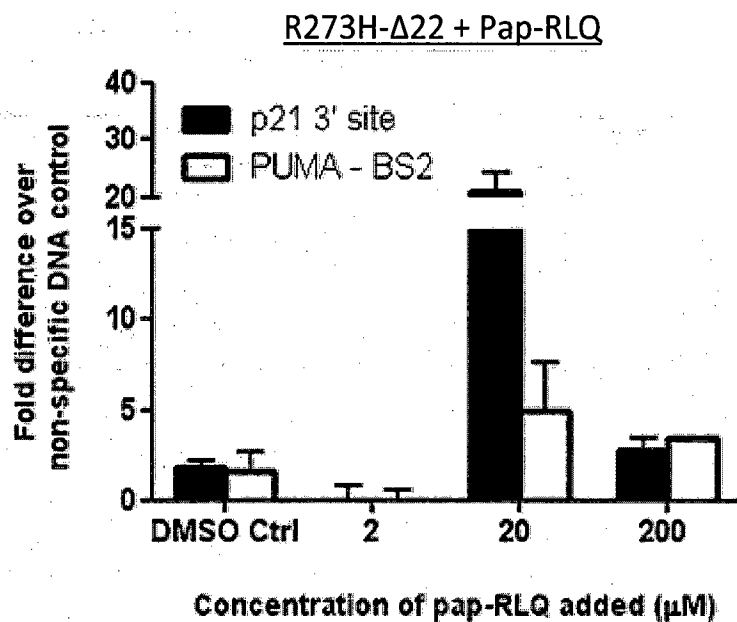
61/ 82

Fig. 36 (continued)

B**C**

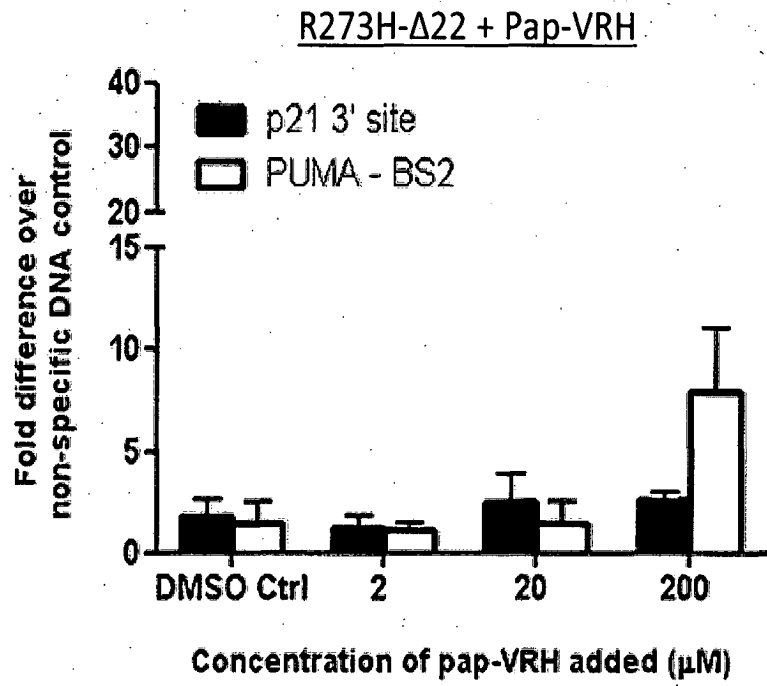
62/ 82

Fig. 36 (continued)

D**E**

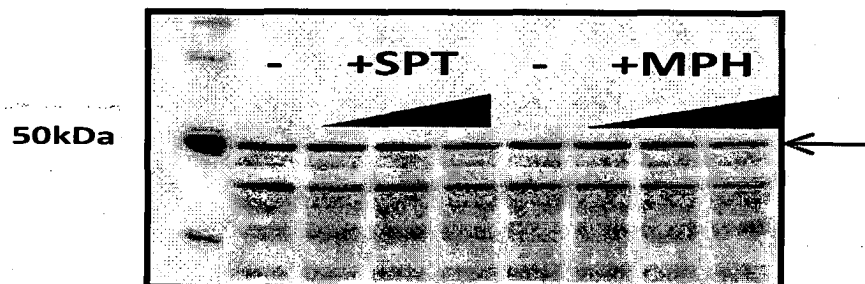
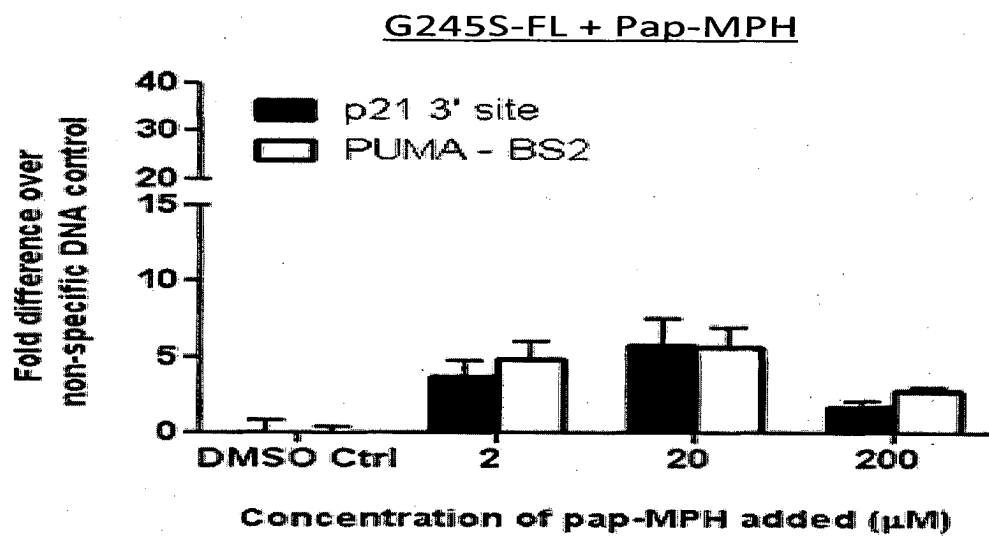
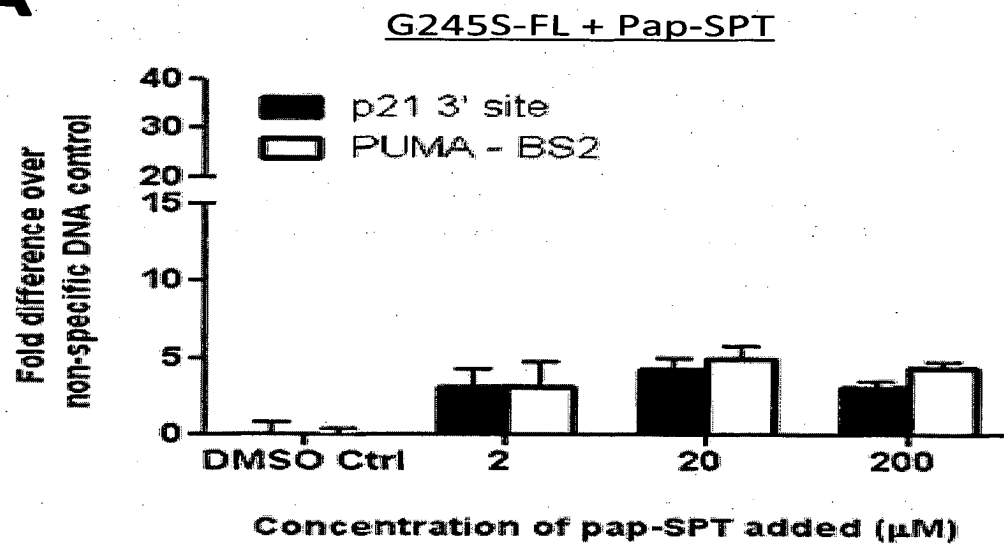
63/ 82

Fig. 36 (continued)

F

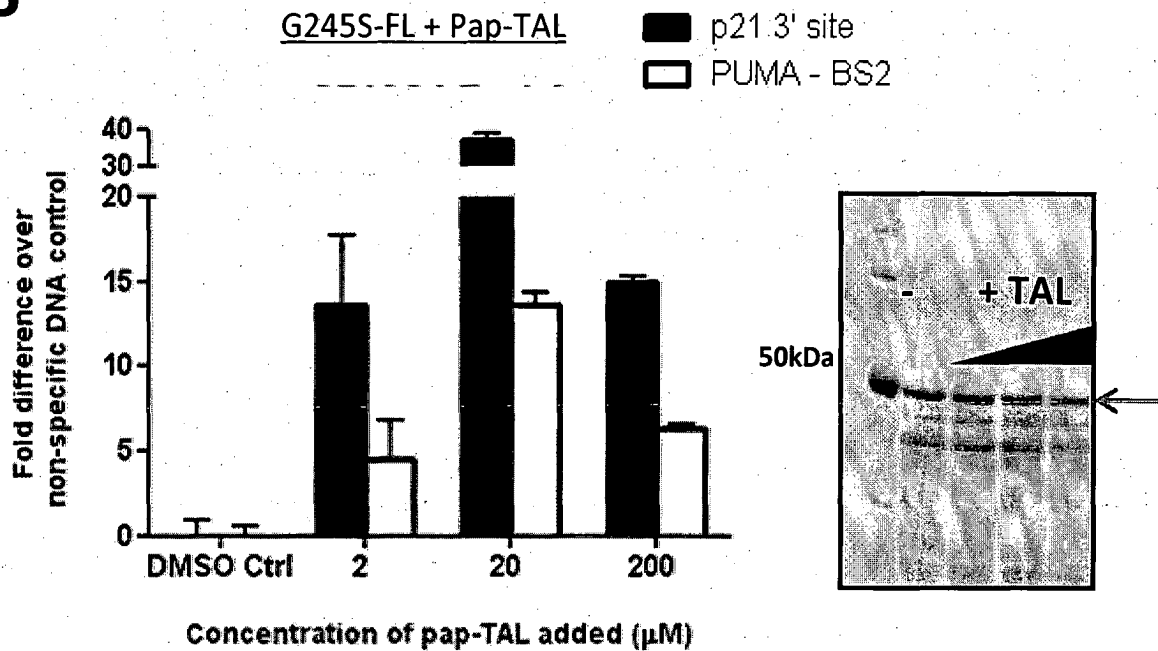
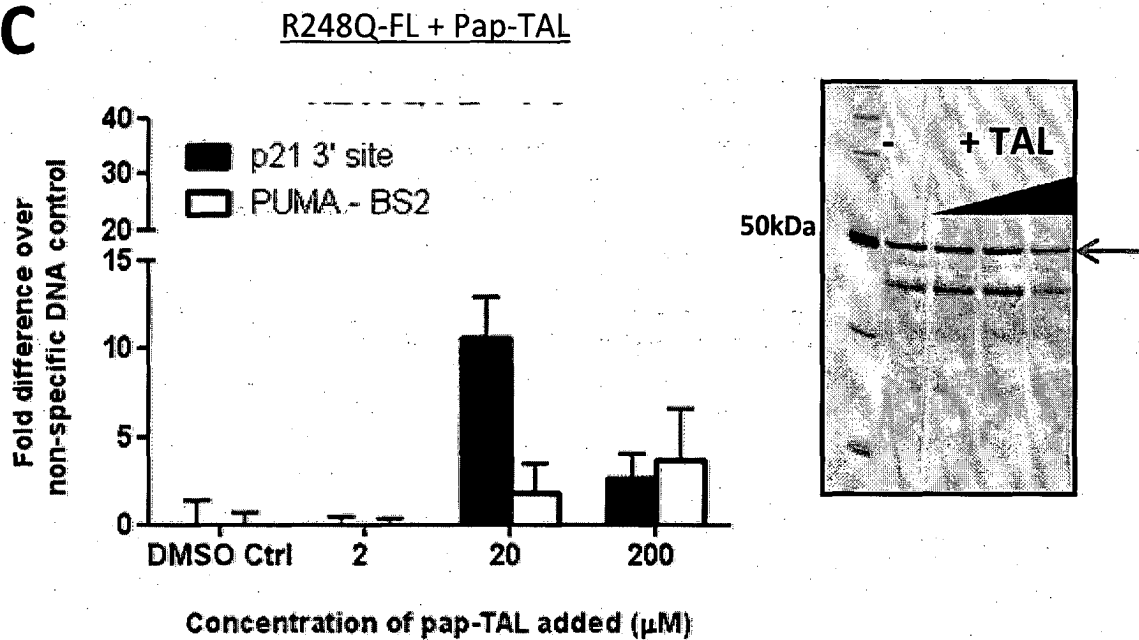
64/ 82

Fig. 37

A

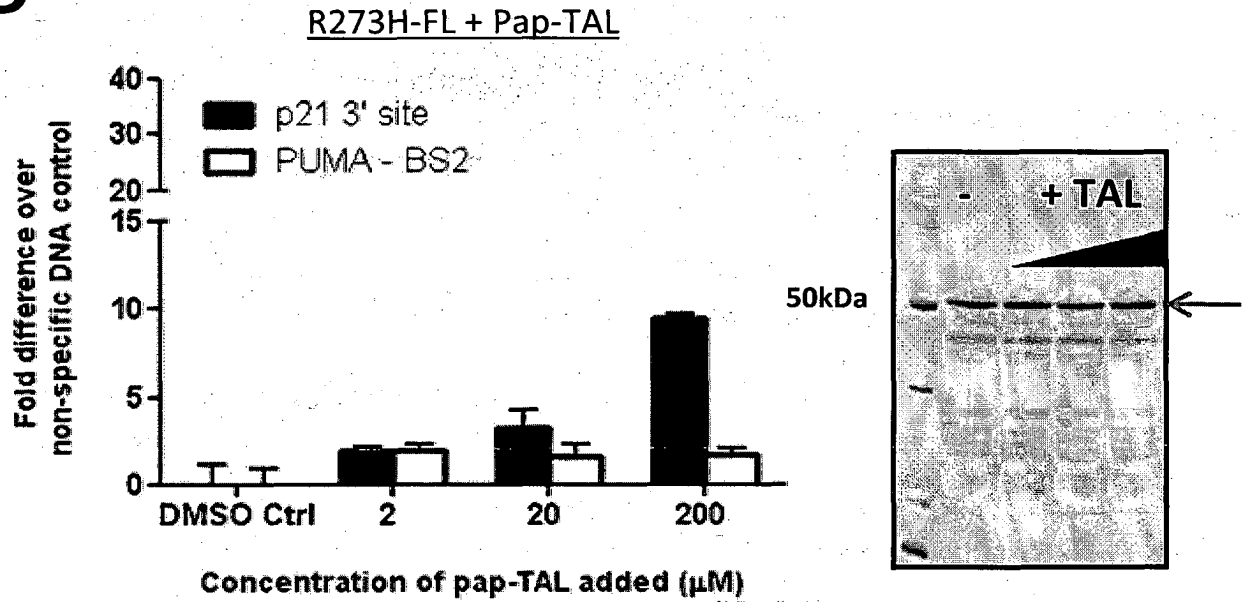
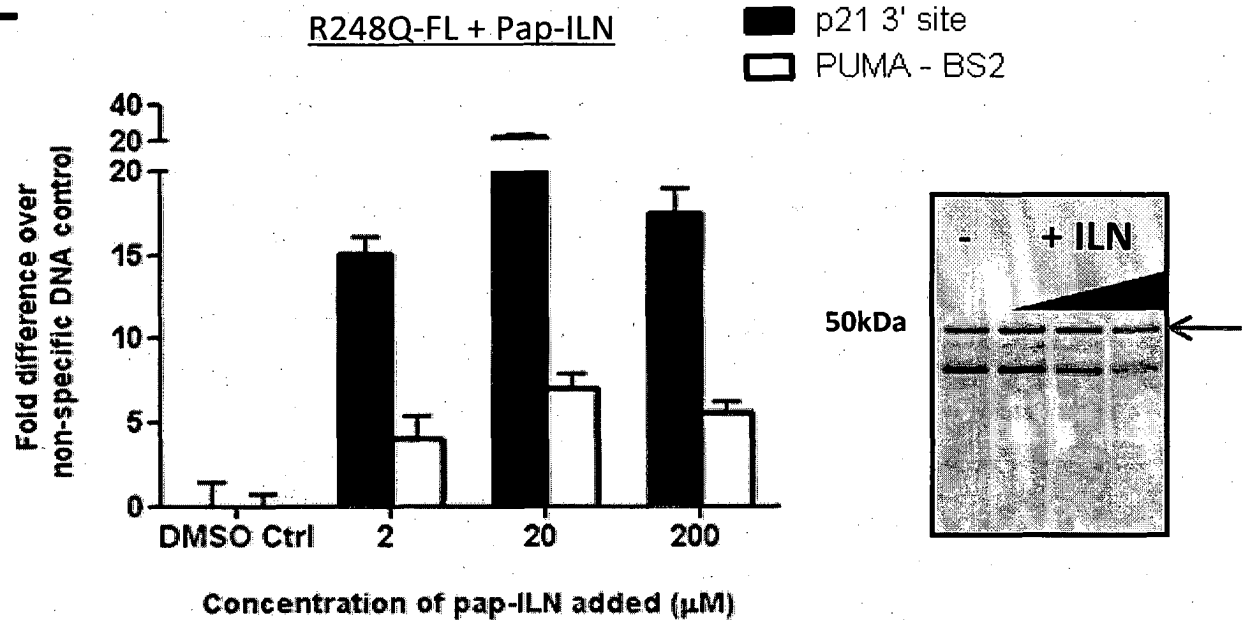
65/ 82

Fig. 37 (continued)

B**C**

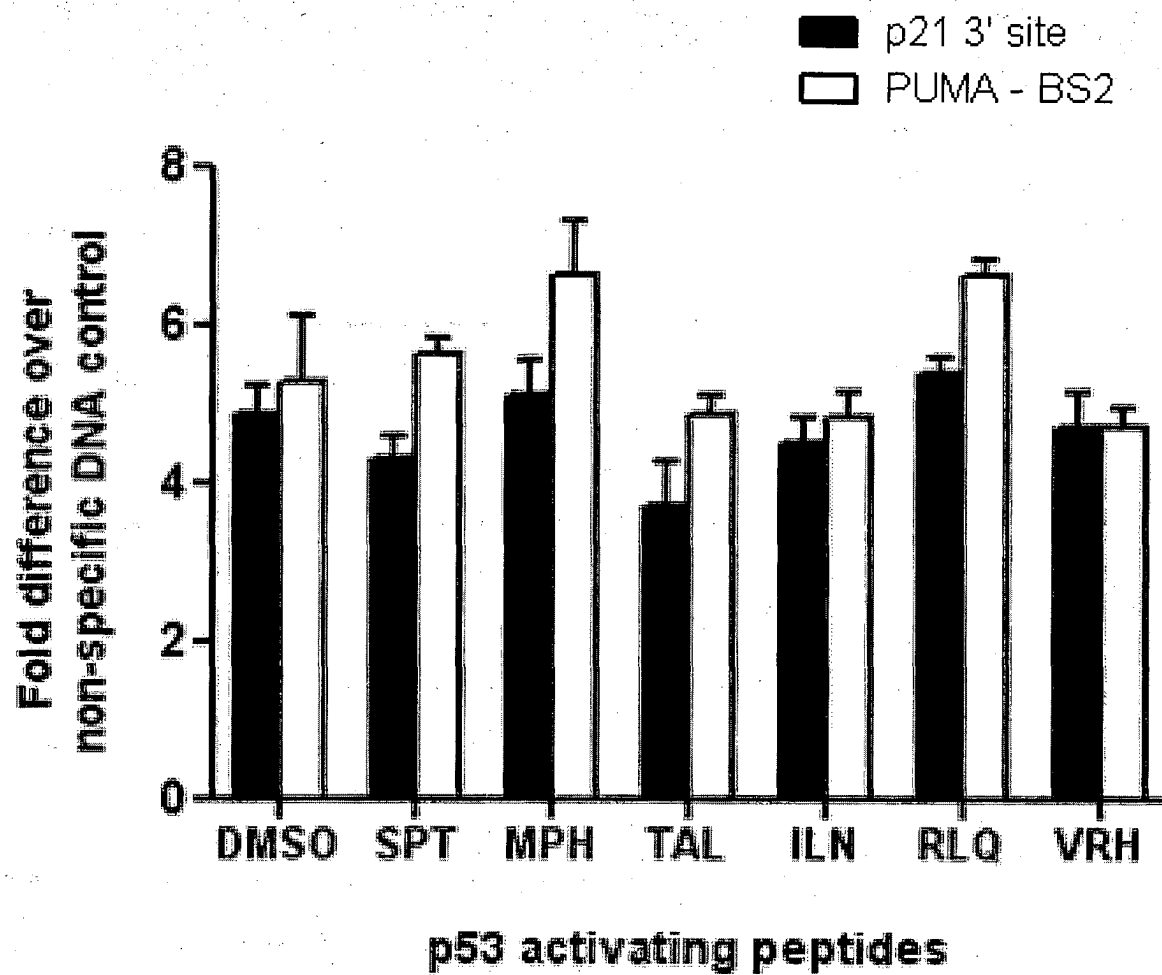
66/ 82

Fig. 37 (continued)

D**E**

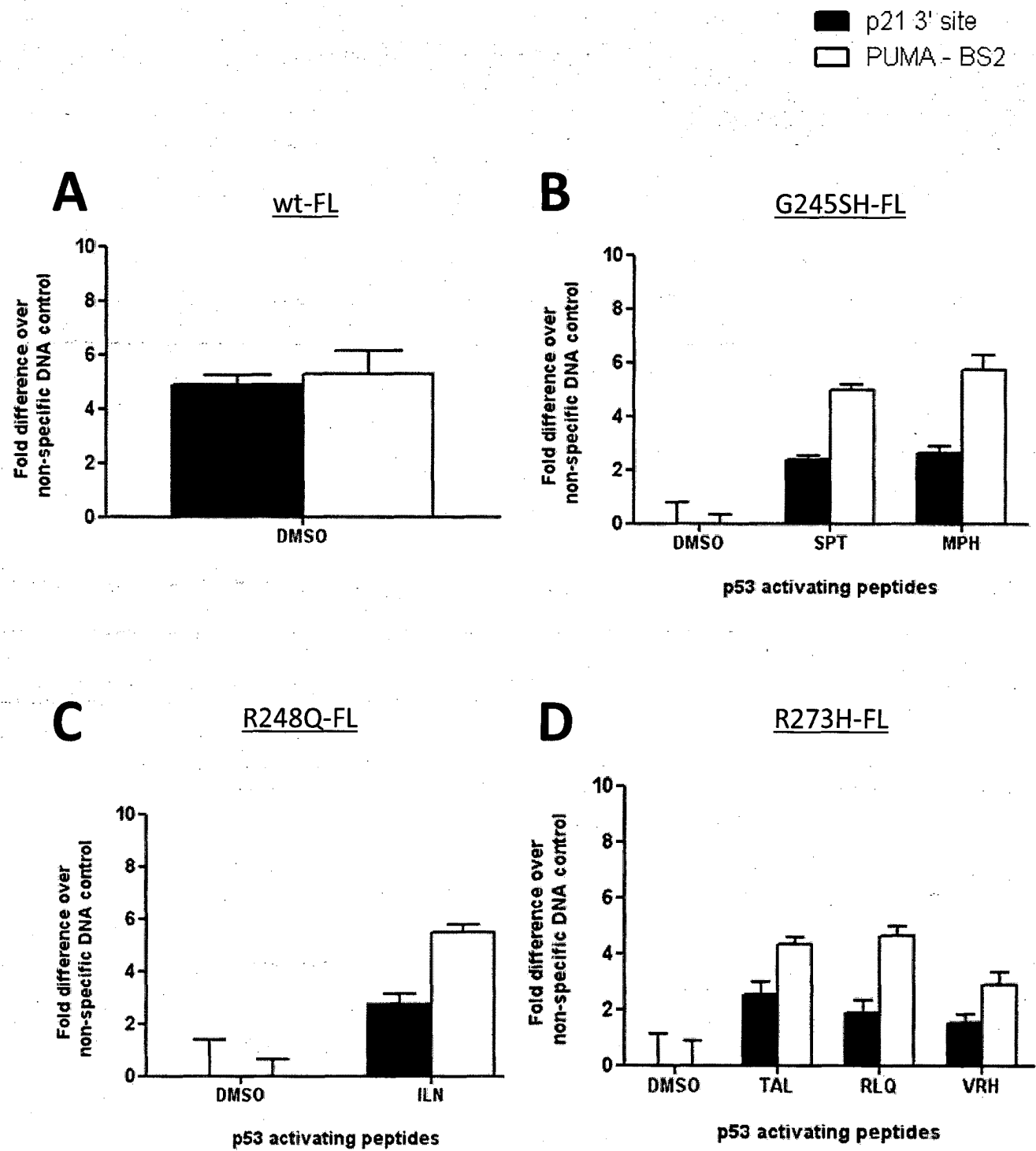
67/ 82

Fig. 37 (continued)

F

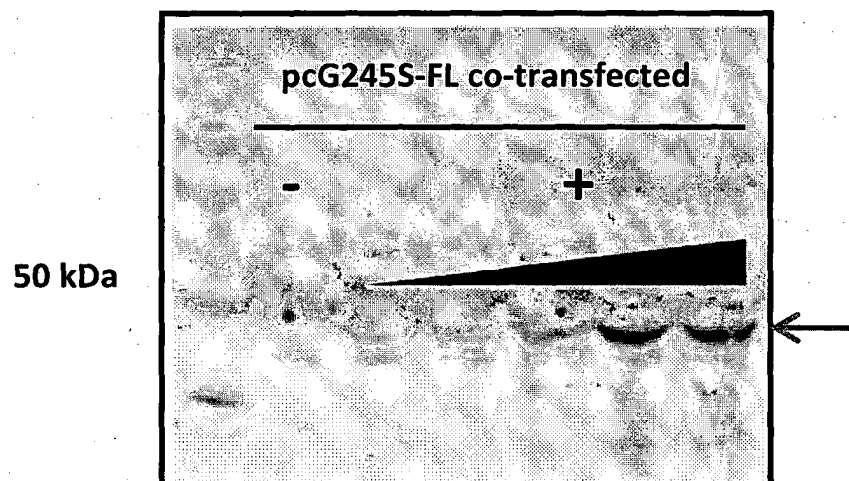
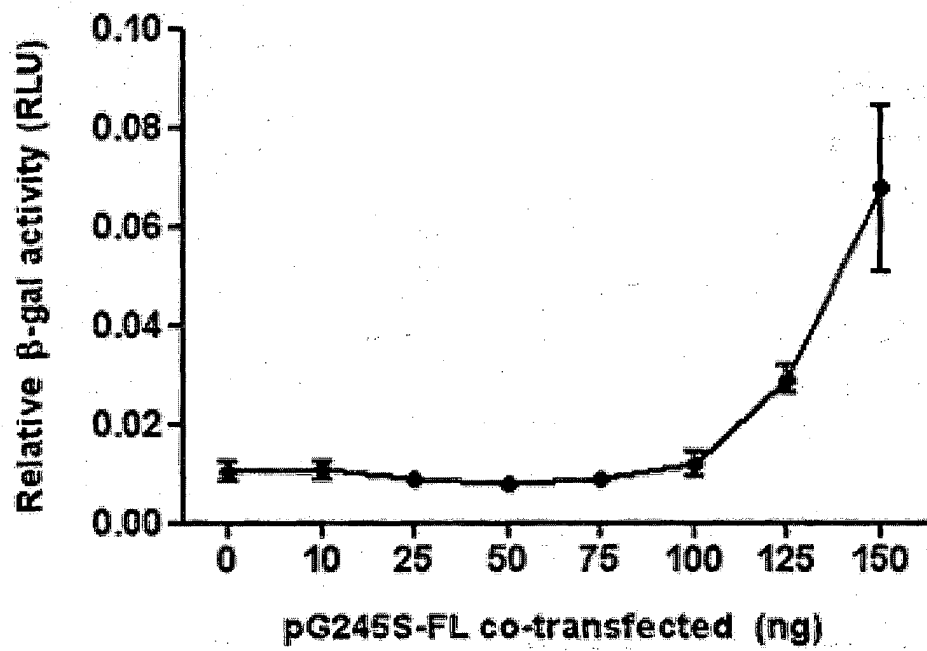
68/ 82

Fig. 38



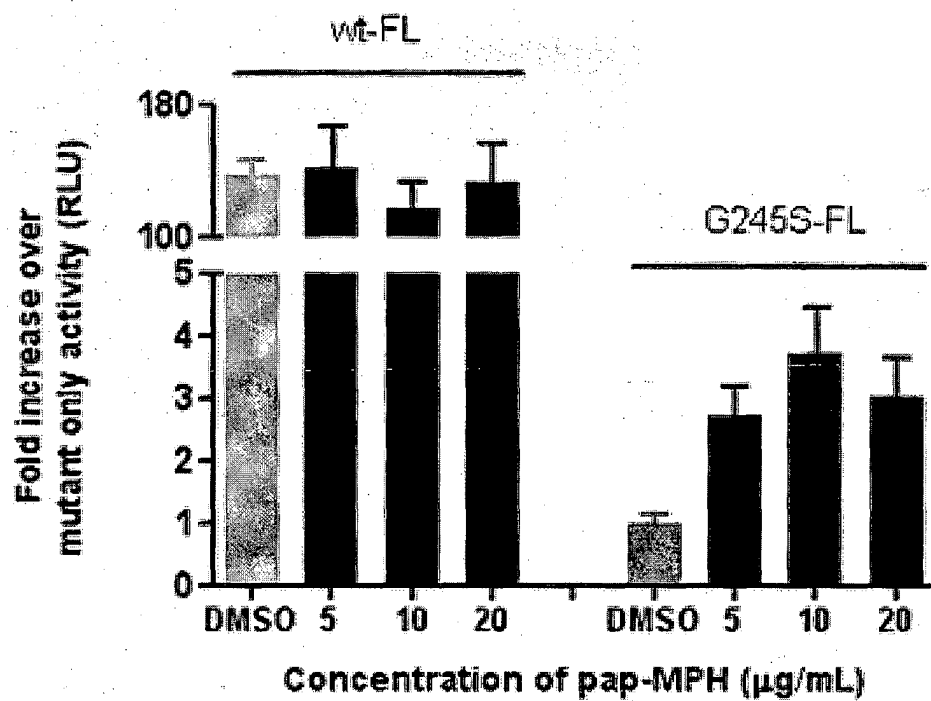
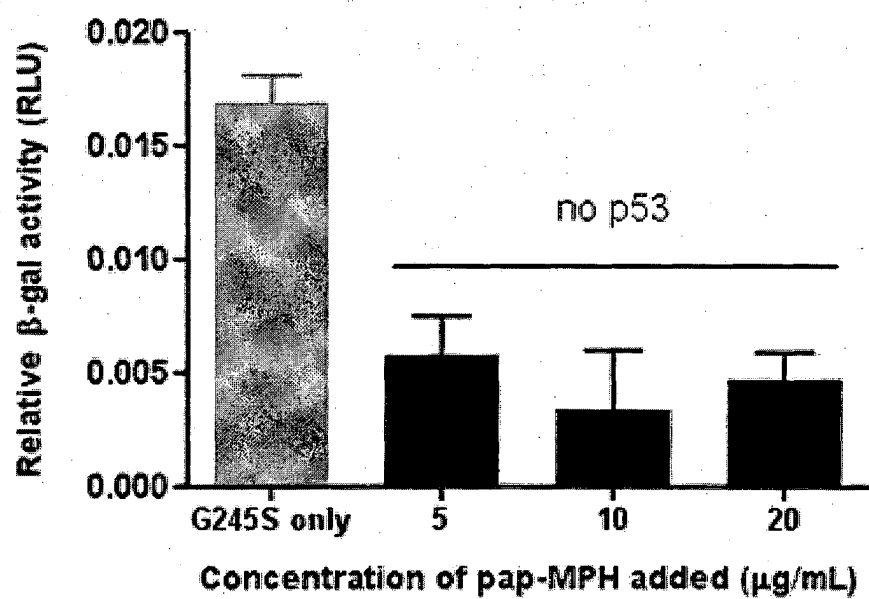
69/ 82

Fig. 39

A

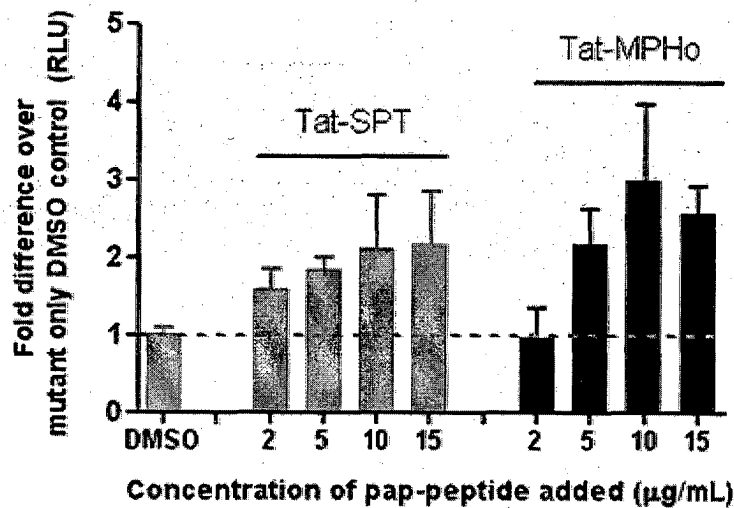
70/ 82

Fig. 40

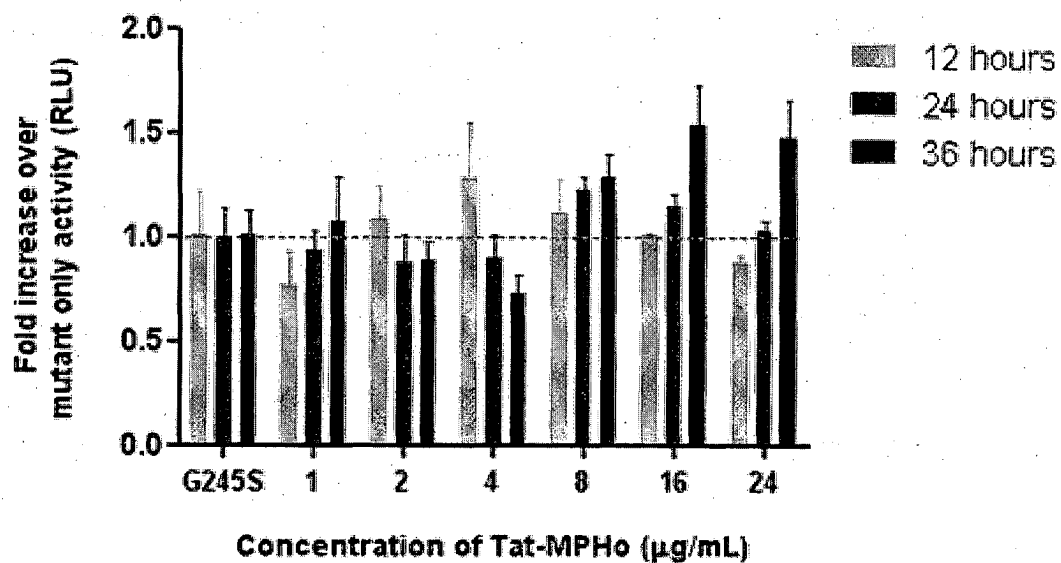
A**B**

71/ 82

Fig. 41

A

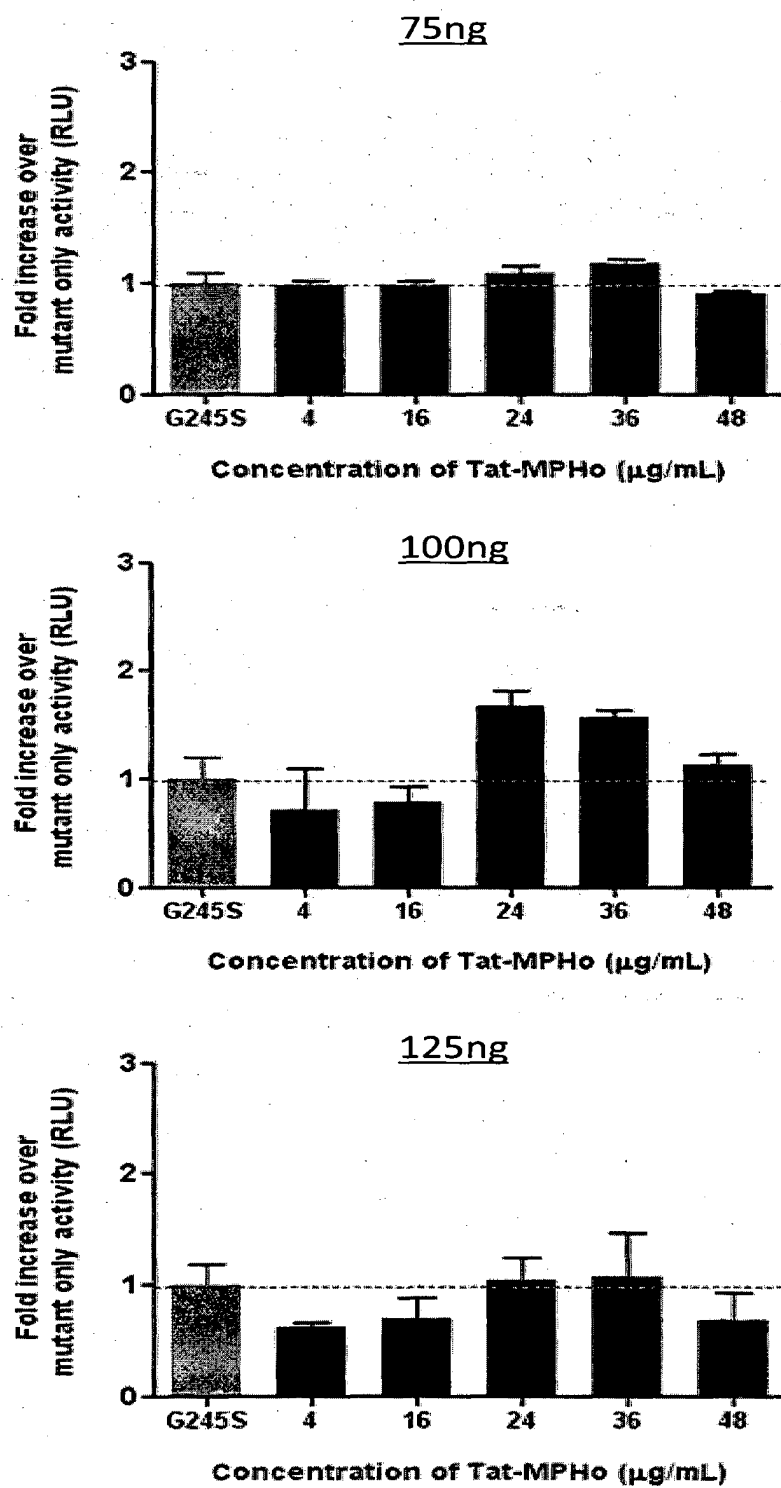
Peptide reference	Tat tag	p53 activating peptide sequence
Tat-SPT	GRKKRRQRRR	MSPNTNH
Tat-MPHo	GRKKRRQRRR	MMPHLMAC
Tat-MPHs	GRKKRRQRRR	MPHLMAC
Tat-Scram	GRKKRRQRRR	CMAPMLHM

B

72/ 82

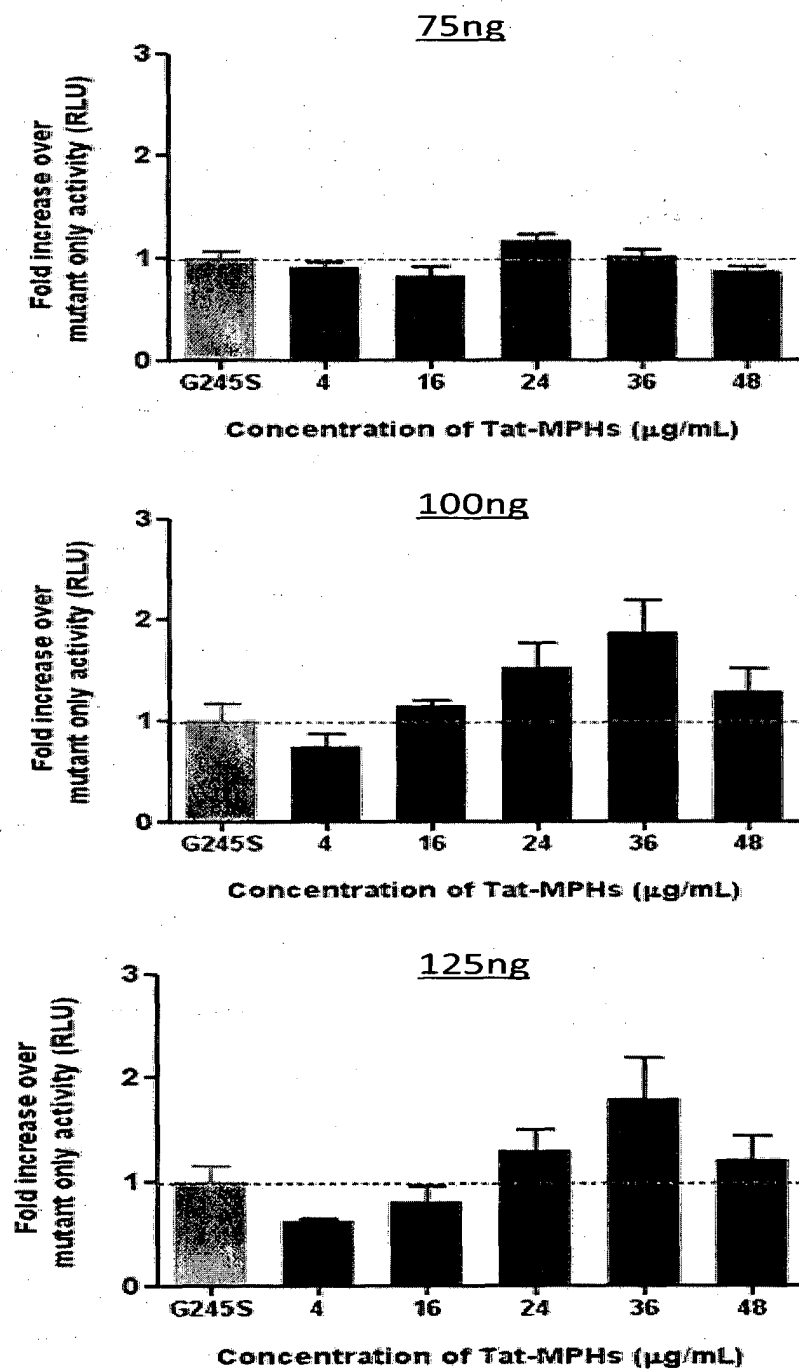
Fig. 41 (continued)

C



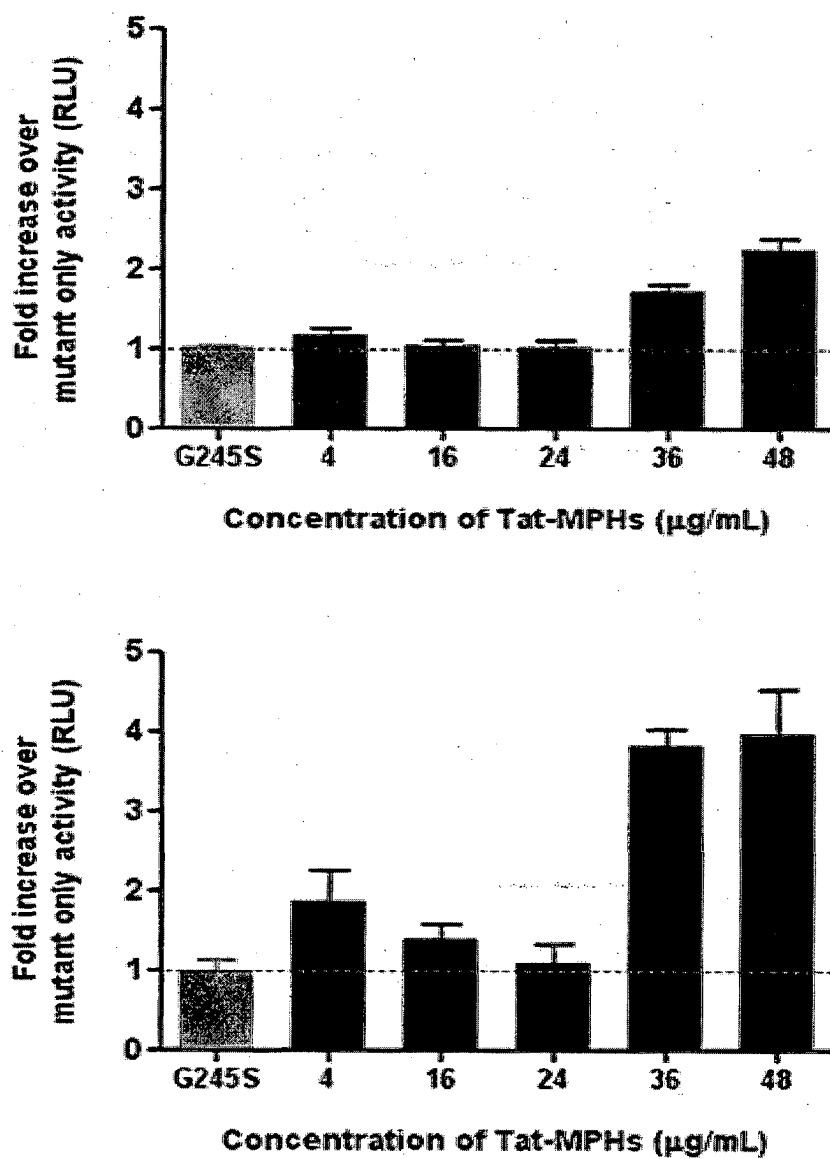
73/82

Fig. 41 (continued)

D

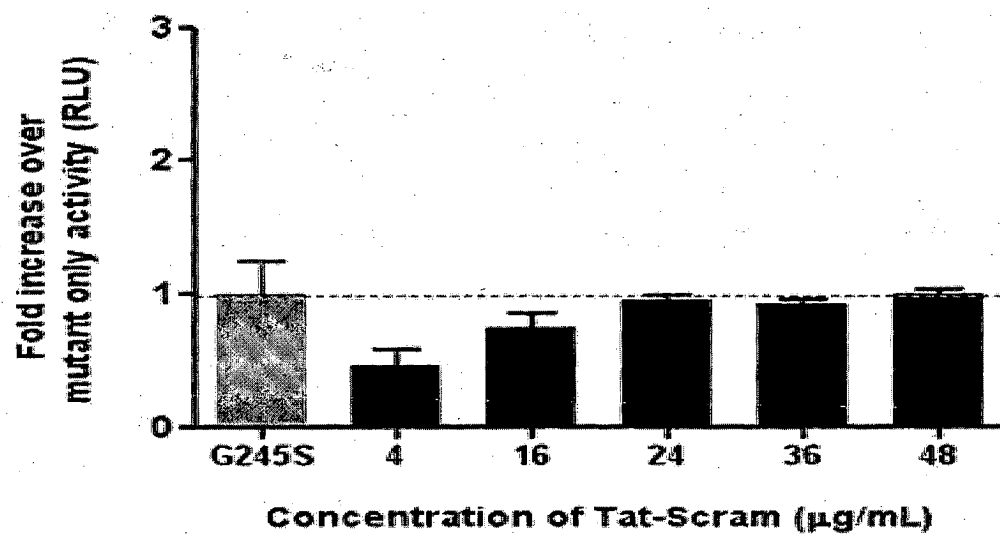
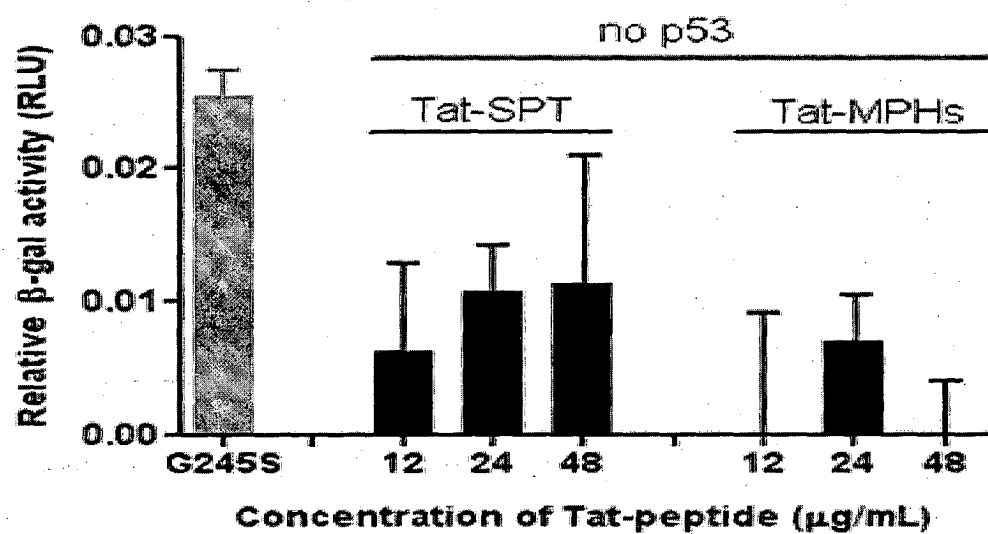
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Fig. 41 (continued)

E

75/ 82

Fig. 41 (continued)

F**G**

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Fig. 42**A****PCR**

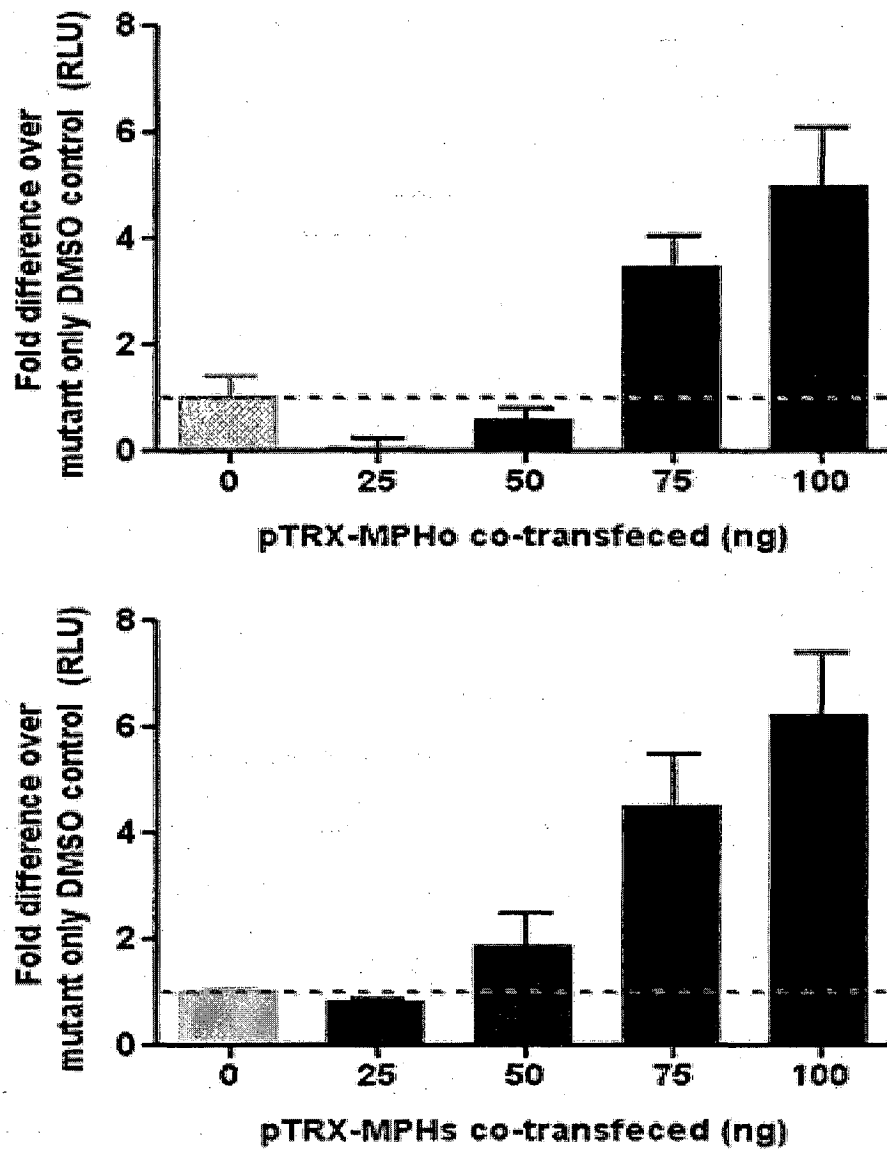
Trx-MPHS  FWAIEWCG MPHLMAC PCKMIA 

Trx-MPHo  FWAIEWCGMMPHLMAC PCKMIA 

Trx-MPHScram  FWAIEWCGCMAPMLHMPCKMIA 

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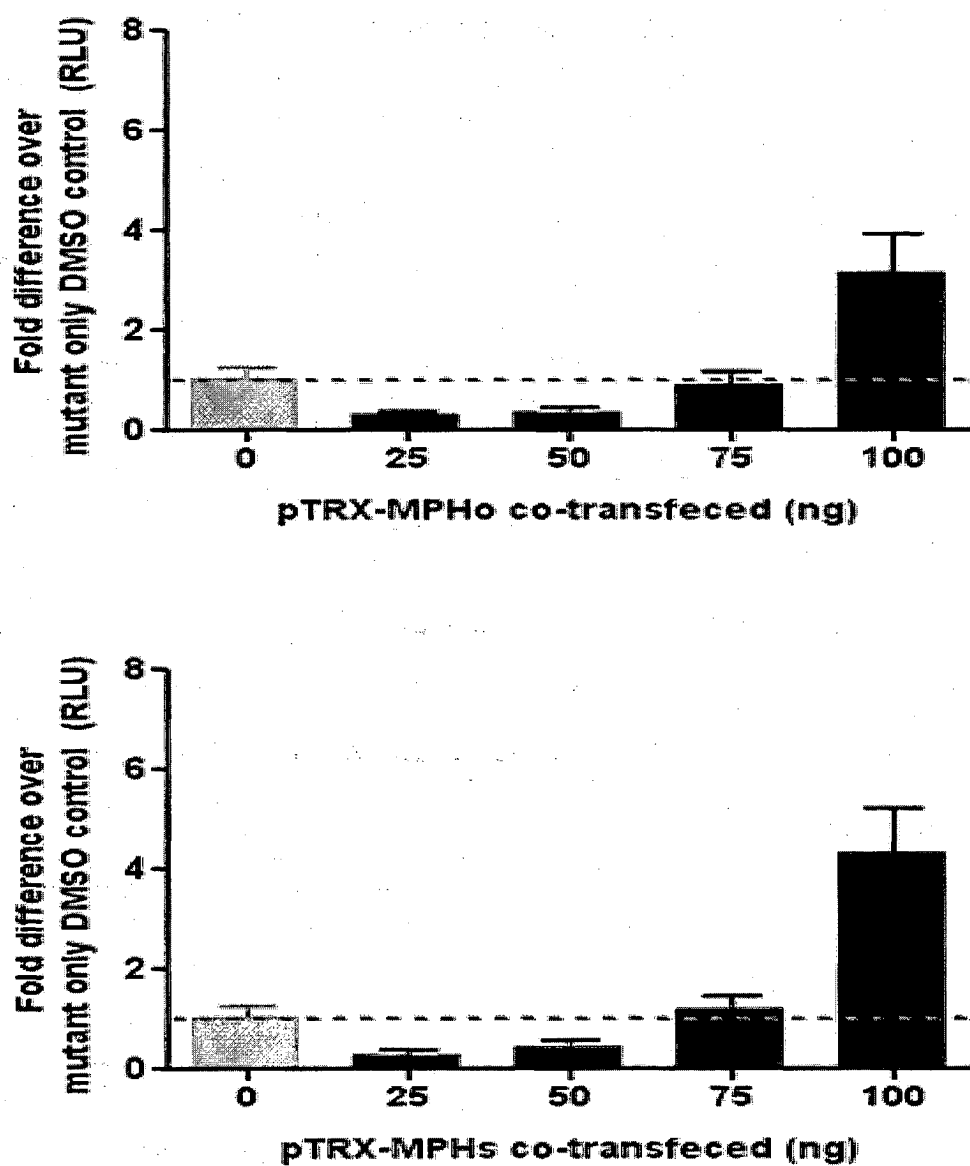
Fig. 42 (continued)

B

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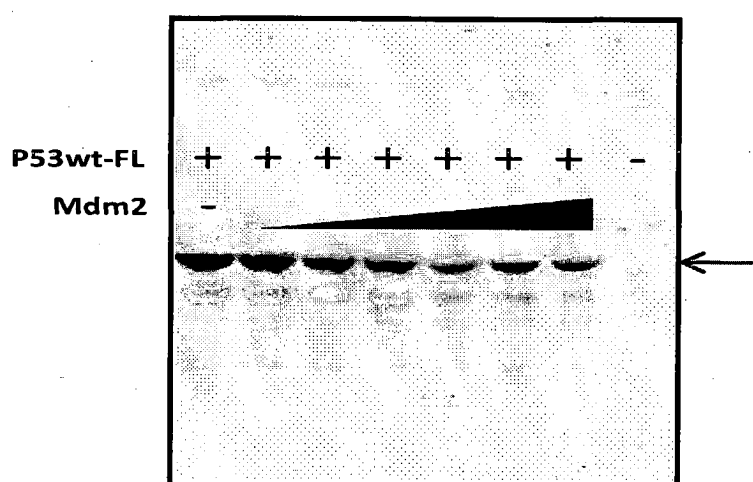
Fig. 42 (continued)

C



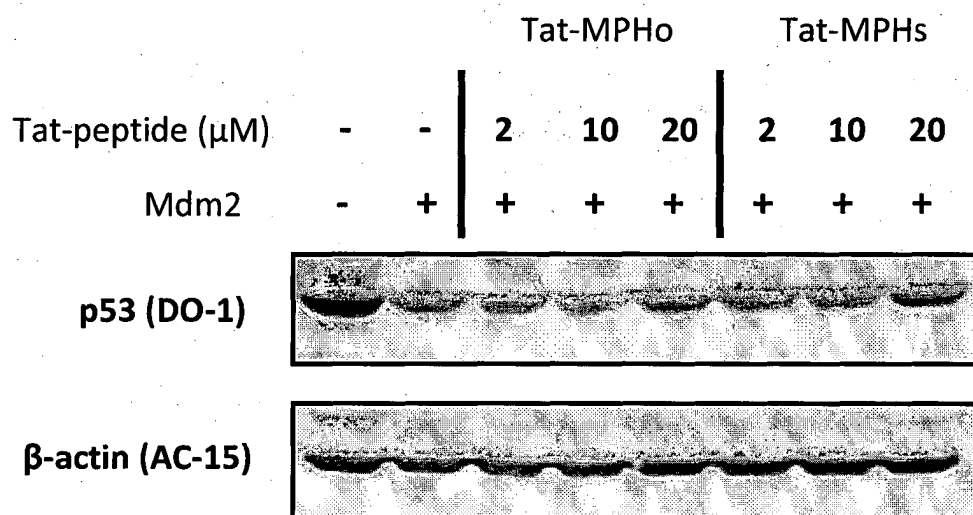
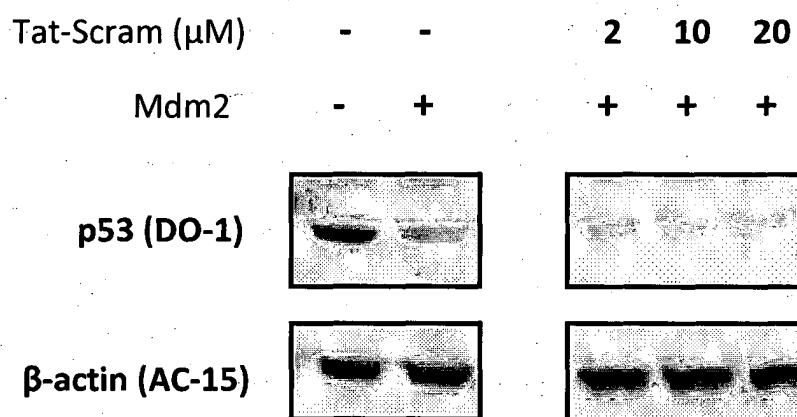
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Fig. 43

A

80/82

Fig. 43 (continued)

B**C**

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Fig. 44

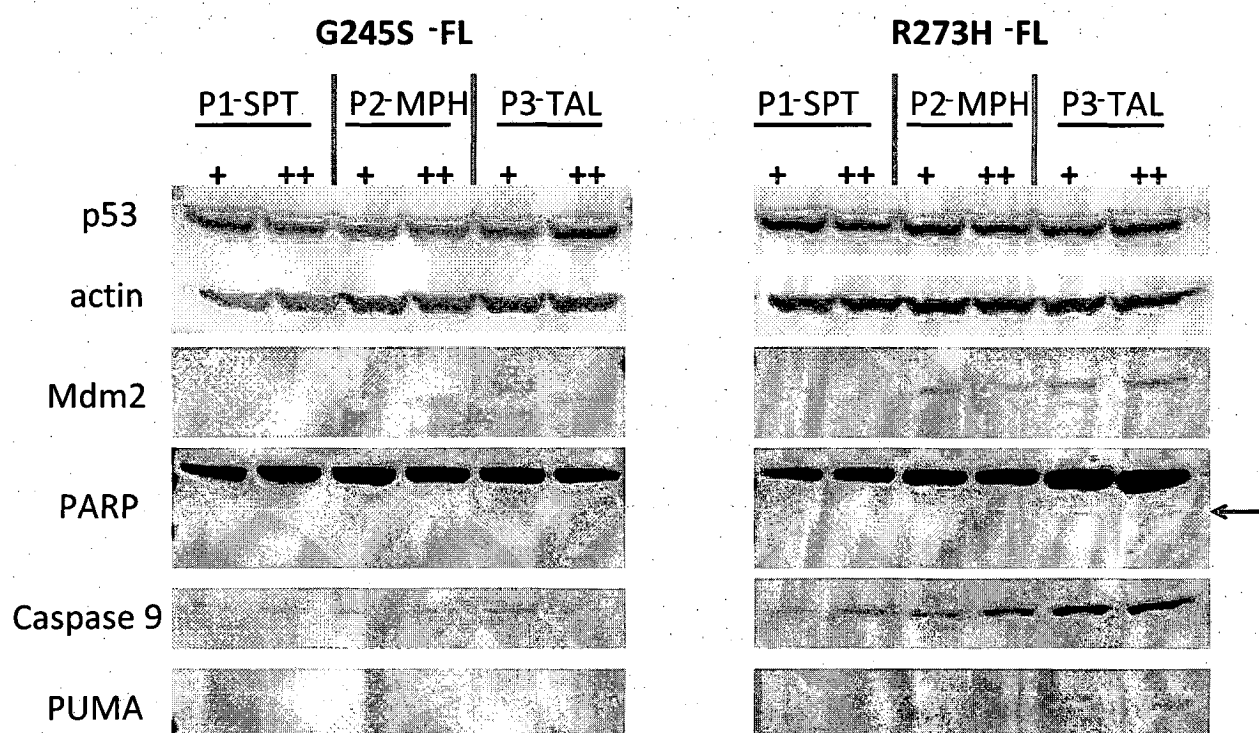
A**Tat-conjugated peptide activity on over-expressed mp53 in H1299 cells**

Fig. 44 (continued)

B

Tat-conjugated peptide activity in H1299 ecdysone inducible system

