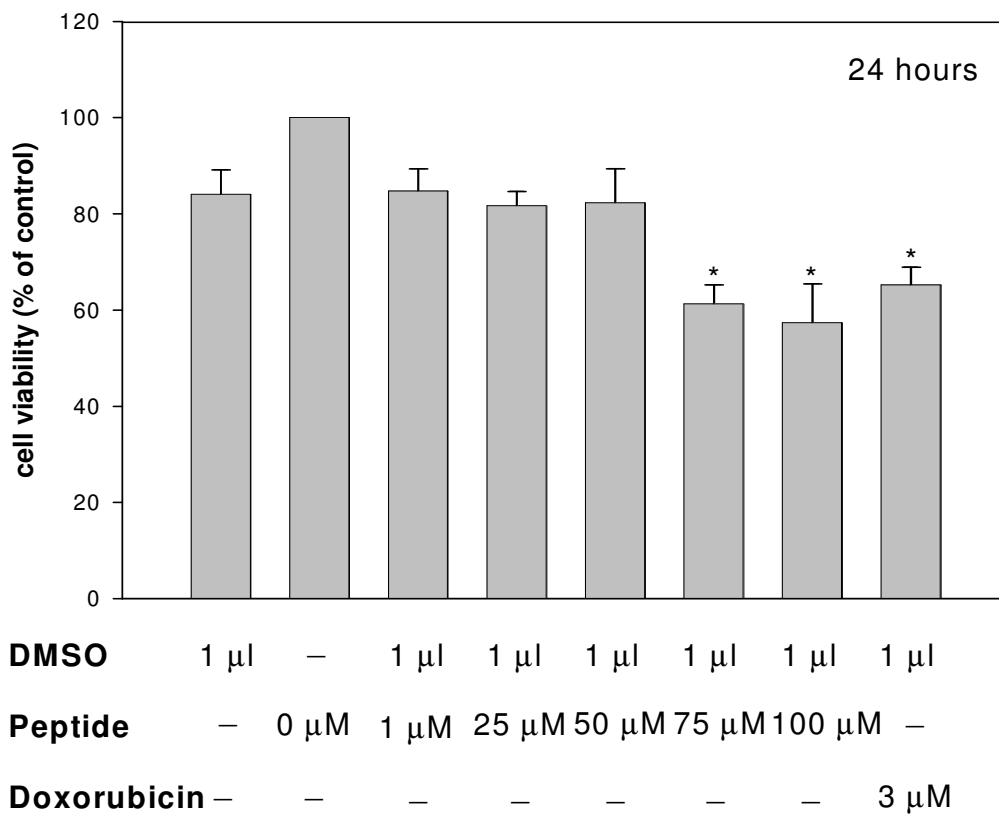


附錄圖表

Breast cancer cell MCF-7 viability

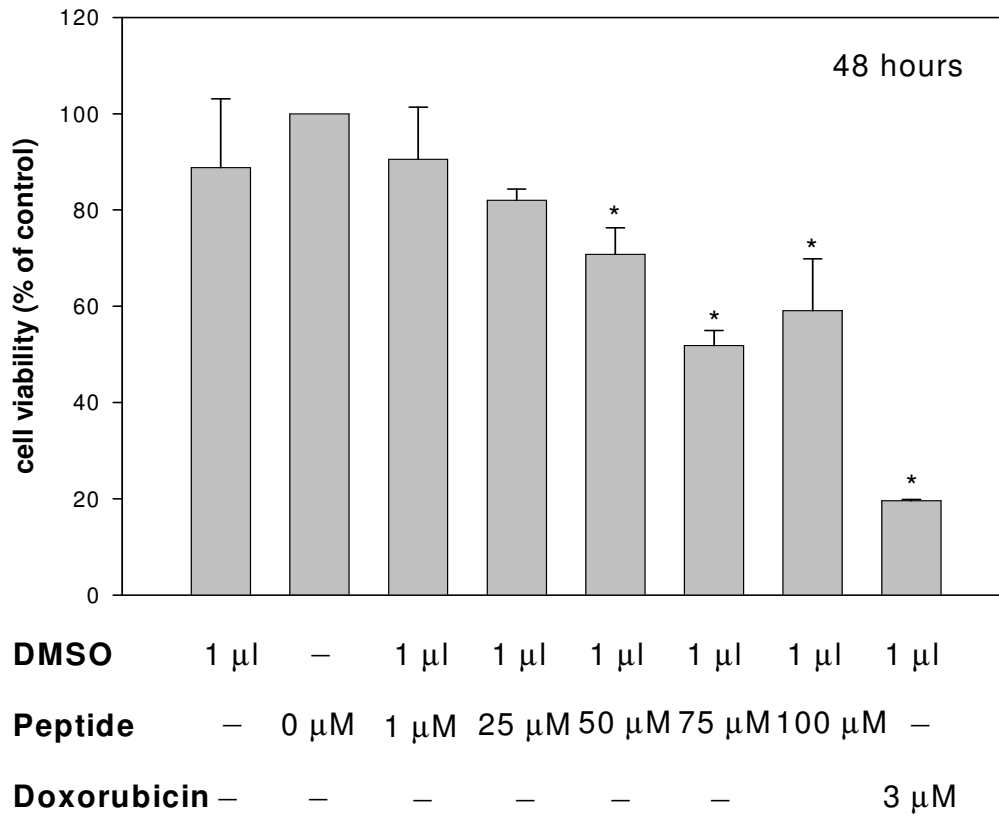


將人類乳癌細胞 MCF-7 利用設計胜肽 peptide 1 (Fmoc-Glu-Tyr-Aib- Asn-NH<sub>2</sub>) 序列濃度(DMSO, 0, 1, 25, 50, 75,與 100 μM) 與 Doxorubicin 處理 24 小時之存活率

Human breast cancer cells MCF-7 were treated with DMSO、0、1、25、50、75 and 100 μM of design peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) and Doxorubicin as positive control for 24 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.  
Data are presented as the mean  $\pm$  SD (n=3)

### Breast cancer cell MCF-7 viability

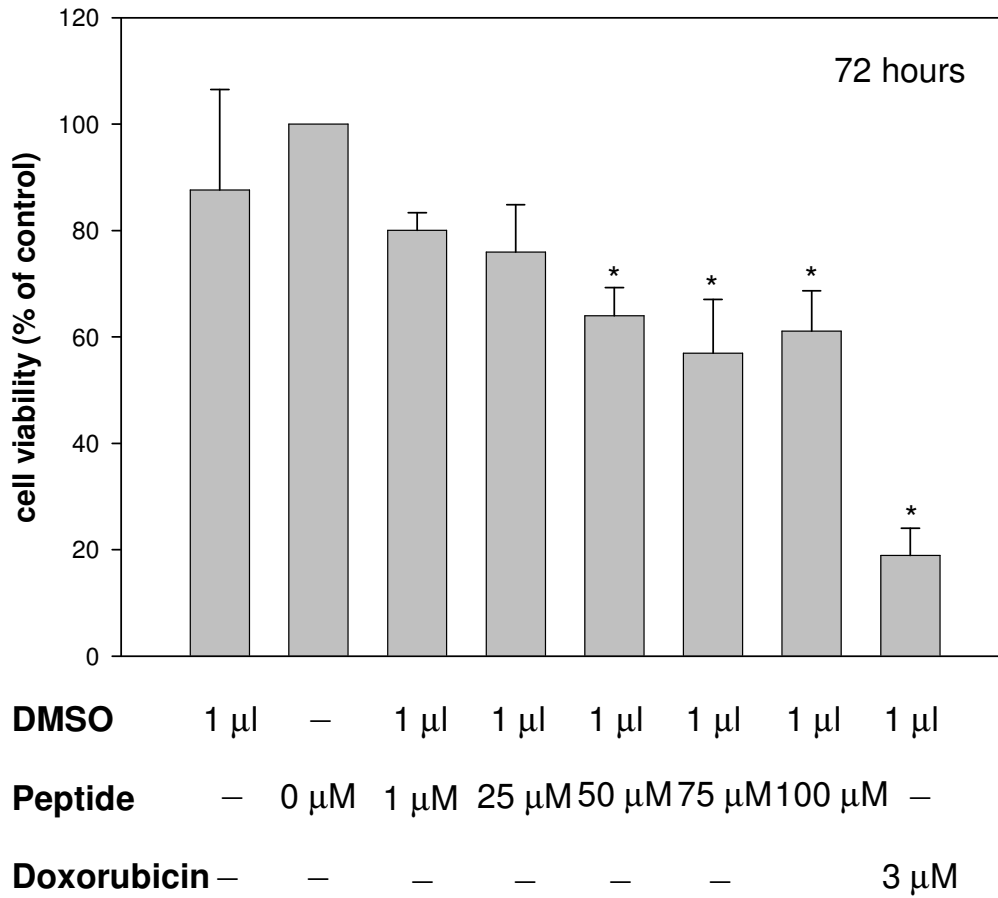


將人類乳癌細胞 MCF-7 利用設計胜肽 peptide 1 (Fmoc-Glu-Tyr-Aib- Asn- NH<sub>2</sub>) 序列濃度(DMSO、0、1、25、50、75 and 100 μM) 與 Doxorubicin 處理 48 小時之存活率

Human breast cancer cells MCF-7 were treated with DMSO, 0, 1, 25, 50, 75, and 100 μM of design peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) and Doxorubicin as positive control for 48 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.  
 Data are presented as the mean  $\pm$  SD (n=3)

### Breast cancer cell MCF-7 viability

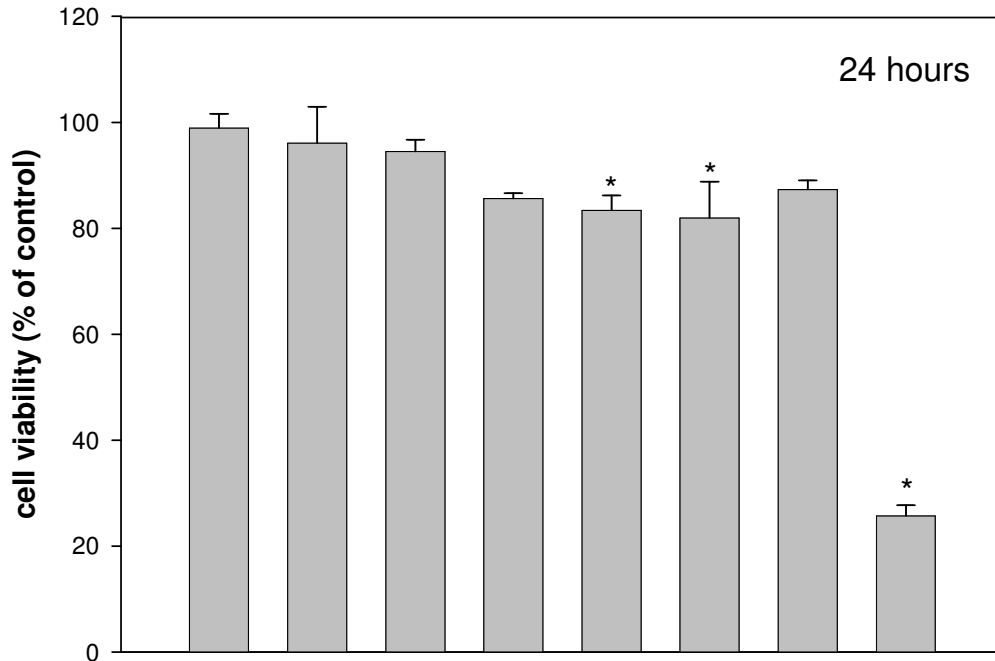


將人類乳癌細胞 MCF-7 利用設計胜肽 peptide 1 (Fmoc-Glu-Tyr-Aib- Asn- NH<sub>2</sub>) 序列濃度(DMSO、 0、 1、 25、 50、 75 and 100 µM) 與 Doxorubicin 處理 72 小時之存活率

Human breast cancer cells MCF-7 were treated with DMSO, 0, 1, 25, 50, 75, and 100 µM of design peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) and Doxorubicin as positive control for 72 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.  
Data are presented as the mean  $\pm$  SD (n=3)

### Breast cancer cell MDA-MB-453 viability



<b>DMSO</b>	1 μl	—	1 μl	1 μl	1 μl	1 μl	1 μl	1 μl	1 μl
<b>Peptide</b>	—	0 μM	1 μM	25 μM	50 μM	75 μM	100 μM	—	—
<b>Doxorubicin</b>	—	—	—	—	—	—	—	—	3 μM

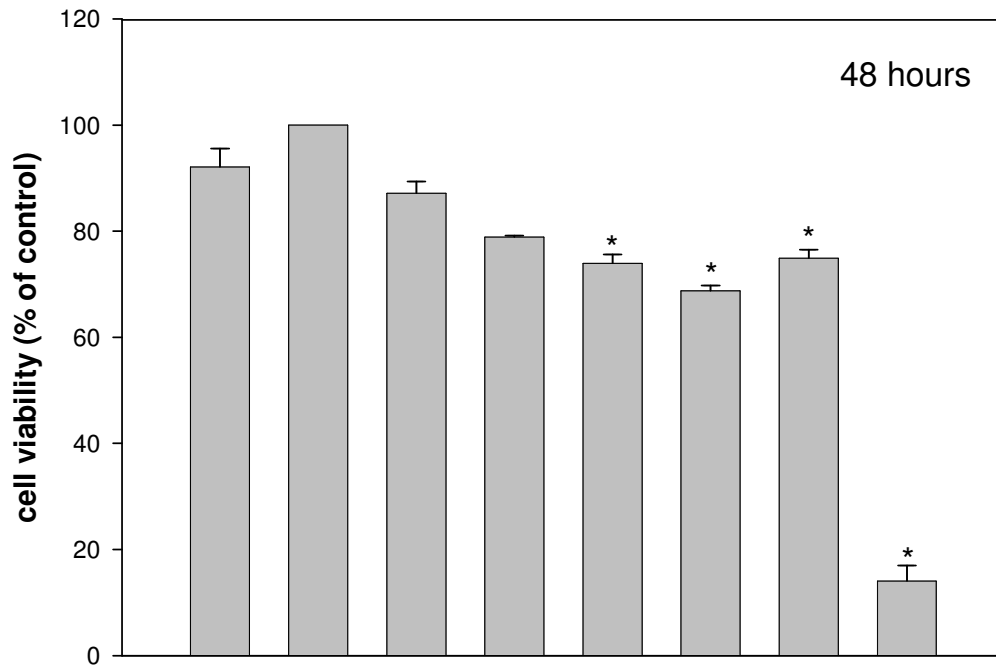
將人類乳癌細胞 MDA-MB-453 利用設計胜肽 peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) 序列濃度(DMSO、0、1、25、50、75 and 100 μM) 與 Doxorubicin 處理 24 小時之存活率

Human breast cancer cells MDA-MB-453 were treated with DMSO, 0, 1, 25, 50, 75, and 100 μM of design peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) and Doxorubicin as positive control for 24 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.

Data are presented as the mean  $\pm$  SD (n = 3)

### Breast cancer cell MDA-MB-453 viability



<b>DMSO</b>	1 μl	—	1 μl	1 μl	1 μl	1 μl	1 μl	1 μl	1 μl
<b>Peptide</b>	—	0 μM	1 μM	25 μM	50 μM	75 μM	100 μM	—	—
<b>Doxorubicin</b>	—	—	—	—	—	—	—	—	3 μM

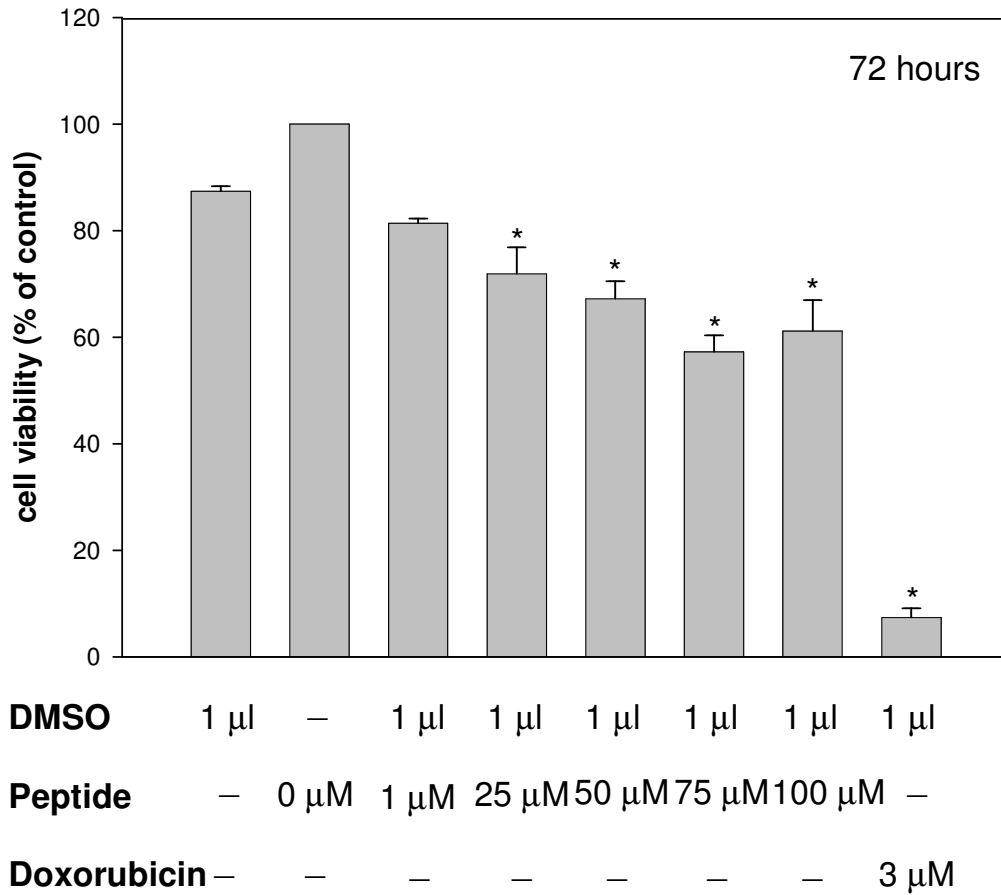
將人類乳癌細胞 MDA-MB-453 利用設計胜肽 peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) 序列濃度(DMSO、0、1、25、50、75 and 100 μM) 與 Doxorubicin 處理 48 小時之存活率

Human breast cancer cells MDA-MB-453 were treated with DMSO, 0, 1, 25, 50, 75, and 100 μM of design peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) and Doxorubicin as positive control for 48 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.

Data are presented as the mean  $\pm$  SD (n = 3)

### Breast cancer cell MDA-MB-453 viability



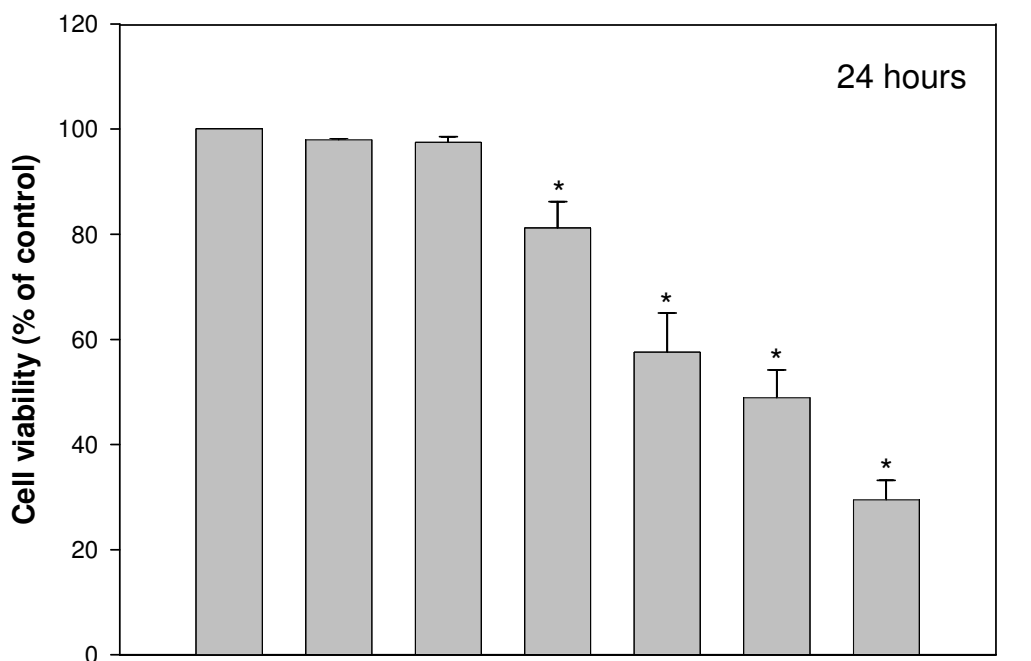
將人類乳癌細胞 MDA-MB-453 利用設計胜肽 peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) 序列濃度(DMSO、0、1、25、50、75 and 100 μM) 與 Doxorubicin 處理 48 小時之存活率

Human breast cancer cells MDA-MB-453 were treated with DMSO, 0, 1, 25, 50, 75, and 100 μM of design peptide 1 (Fmoc-Glu-Tyr-Aib-Asn-NH<sub>2</sub>) and Doxorubicin as positive control for 48 hours. Cell viability was determined by MTT assay.

\* Significant different at p < 0.05 level compared with medium control.

Data are presented as the mean ± SD (n = 3)

### Breast cancer cell MCF-7 viability



<b>RGD</b>	—	100	—	—	—	—	—	( μM )
<b>Peptide 2</b>	0	—	25	50	75	100	—	( μM )
<b>Doxorubicin</b>	—	—	—	—	—	—	3	( μM )

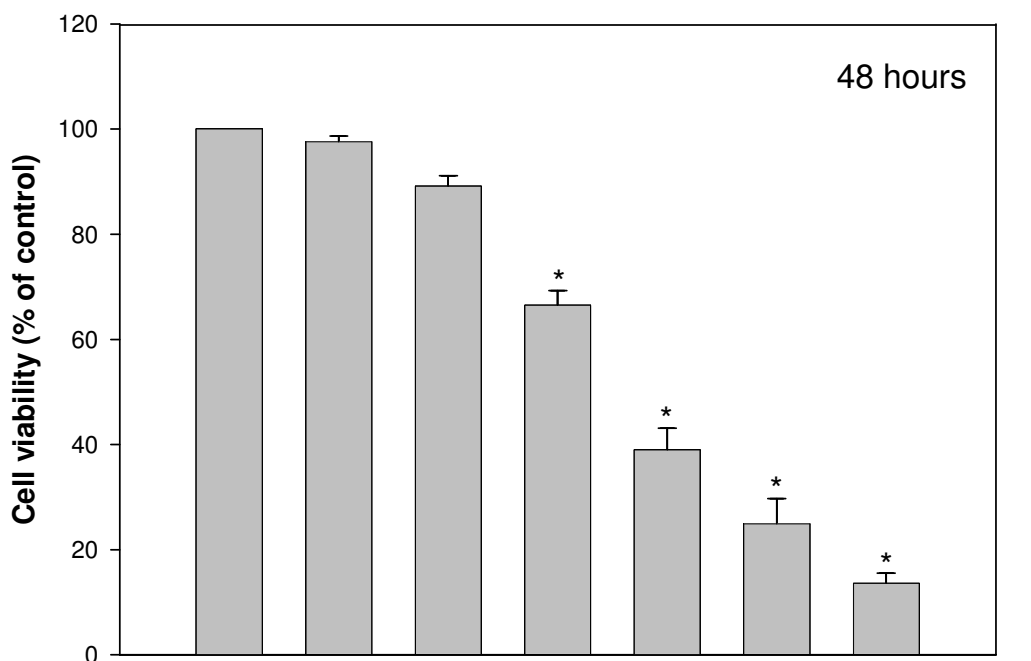
將人類乳癌細胞 MCF-7 利用設計胜肽 peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) 序列濃度(RGD、0、25、50、75 與 100 μM) 與 Doxorubicin 處理 24 小時之存活率

Human breast cancer cells MCF-7 were treated with 0,25, 50, 75, and 100 μM of design peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) and Doxorubicin as positive control, the peptide sequence of RGD as negative control for 24 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.

Data are presented as the mean  $\pm$  SD (n=3)

### Breast cancer cell MCF-7 viability



<b>RGD</b>	—	100	—	—	—	—	—	( μM )
<b>Peptide 2</b>	0	—	25	50	75	100	—	( μM )
<b>Doxorubicin</b>	—	—	—	—	—	—	3	( μM )

將人類乳癌細胞 MCF-7 利用設計胜肽 peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) 序列濃度(RGD、0、25、50、75 與 100 μM) 與 Doxorubicin 處理 48 小時之存活率

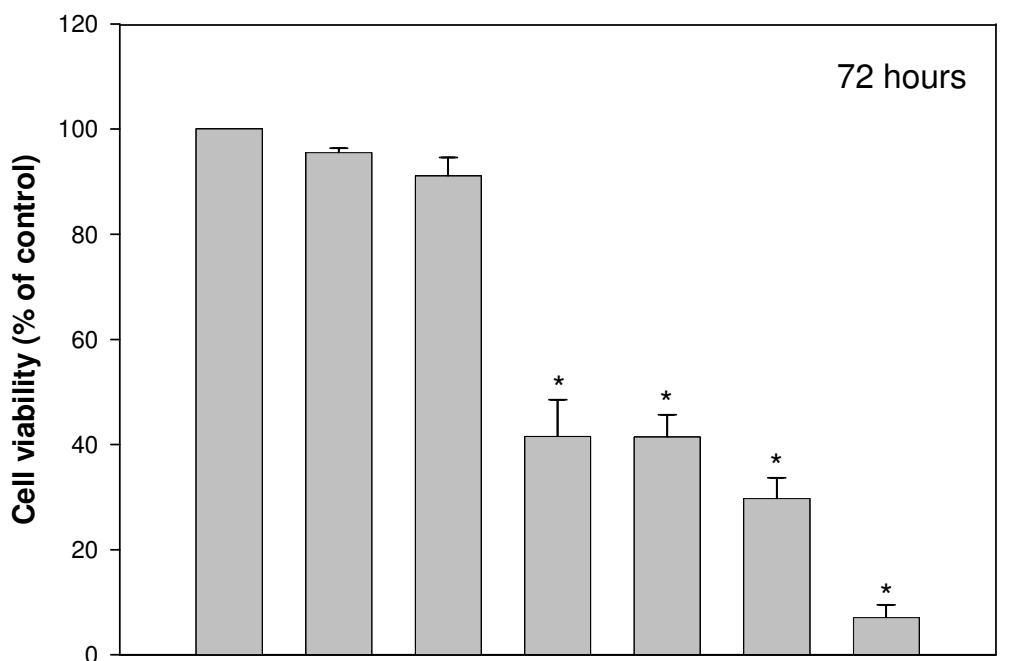
Human breast cancer cells MCF-7 were treated with 0,25, 50, 75, and 100 μM of design peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) and Doxorubicin as positive control, the peptide sequence of RGD as negative control for 48 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.

Data are presented as the mean  $\pm$  SD (n=3)



### Breast cancer cell MCF-7 viability



<b>RGD</b>	—	100	—	—	—	—	—	( μM )
<b>Peptide 2</b>	0	—	25	50	75	100	—	( μM )
<b>Doxorubicin</b>	—	—	—	—	—	—	3	( μM )

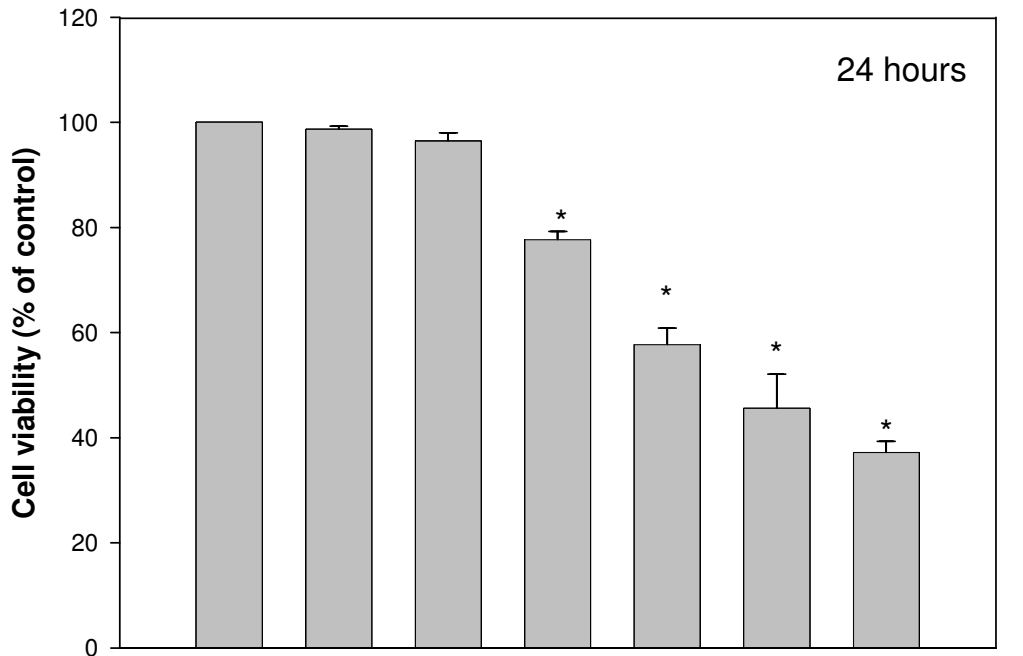
將人類乳癌細胞 MCF-7 利用設計胜肽 peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) 序列濃度(RGD、0、25、50、75 與 100 μM) 與 Doxorubicin 處理 72 小時之存活率

Human breast cancer cells MCF-7 were treated with 0,25, 50, 75, and 100 μM of design peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) and Doxorubicin as positive control, the peptide sequence of RGD as negative control for 72 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.

Data are presented as the mean  $\pm$  SD (n=3)

### Breast cancer cell MDA-MB-453 viability



<b>RGD</b>	—	100	—	—	—	—	—	( μM )
<b>Peptide 2</b>	0	—	25	50	75	100	—	( μM )
<b>Doxorubicin</b>	—	—	—	—	—	—	3	( μM )

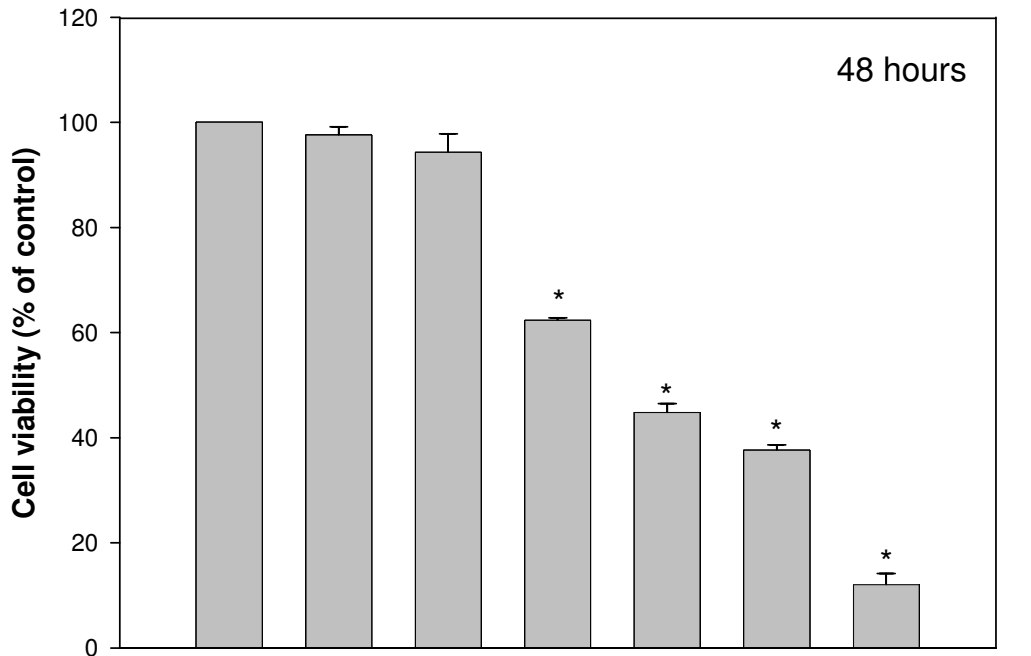
將人類乳癌細胞 MDA-MB-453 利用設計胜肽 peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) 序列濃度(RGD、0、50、75 與 100 μM) 與 Doxorubicin 處理 24 小時之存活率

Human breast cancer cells MDA-MB-453 were treated with 0, 50, 75, and 100 μM of design peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) and Doxorubicin as positive control, the peptide sequence of RGD as negative control for 24 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.

Data are presented as the mean  $\pm$  SD (n=3)

### Breast cancer cell MDA-MB-453 viability



<b>RGD</b>	—	100	—	—	—	—	—	( μM )
<b>Peptide 2</b>	0	—	25	50	75	100	—	( μM )
<b>Doxorubicin</b>	—	—	—	—	—	—	3	( μM )

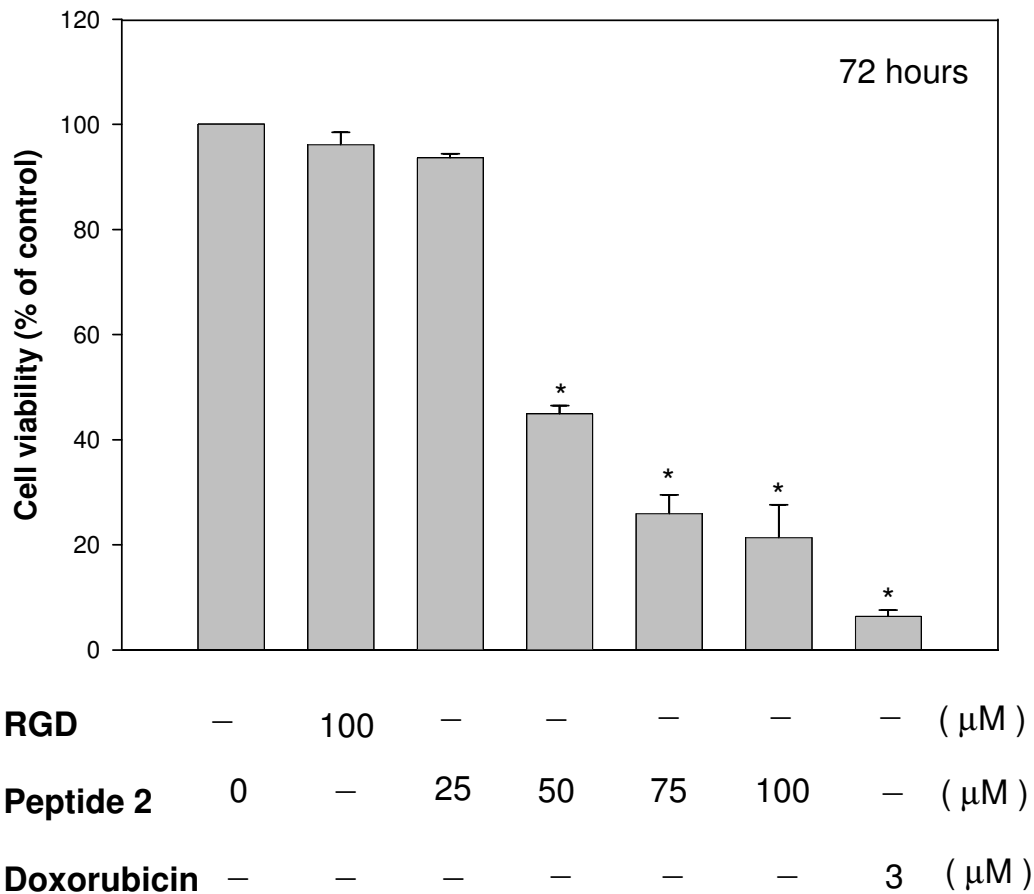
將人類乳癌細胞 MDA-MB-453 利用設計胜肽 peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) 序列濃度(RGD、0、50、75 與 100 μM) 與 Doxorubicin 處理 48 小時之存活率

Human breast cancer cells MDA-MB-453 were treated with 0, 50, 75, and 100 μM of design peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) and Doxorubicin as positive control, the peptide sequence of RGD as negative control for 48 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.

Data are presented as the mean  $\pm$  SD (n=3)

### Breast cancer cell MDA-MB-453 viability



將人類乳癌細胞 MDA-MB-453 利用設計胜肽 peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) 序列濃度(RGD、0、50、75 與 100 μM) 與 Doxorubicin 處理 72 小時之存活率

Human breast cancer cells MDA-MB-453 were treated with 0, 50, 75, and 100 μM of design peptide 2 (Arg-Gly-Asp-Glu-Tyr-Aib-Asn-Arg-Gly-Asp-NH<sub>2</sub>) and Doxorubicin as positive control, the peptide sequence of RGD as negative control for 72 hours. Cell viability was determined by MTT assay.

\* Significant different at  $p < 0.05$  level compared with medium control.  
Data are presented as the mean  $\pm$  SD (n=3)