# Amplexicaule A exerts anti-tumor effects by inducing apoptosis in human breast cancer

## Supplementary Materials

### Supplementary Table S1: Effect of APA and APB from PADFon xenografted tumor growth in MCF-7 ells

| Group | Dose | Mice weight (g) | | Tumor weight |
|---|---|---|---|---|
| | mg/kg | Start | End | (g) |
| Saline | – | 20.5 ± 1.2 | 27.3 ± 1.1 | 1.43 ± 0.32 |
| APA | 150 | 21.2 ± 1.3 | 27.4 ± 0.9 | 0.70 ± 0.25* |
| APB | 150 | 21.1 ± 1.1 | 27.1 ± 1.2 | 1.37 ± 0.26 |

*$P < 0.05$, compared to tumor-bearing mice treated with saline.

### Supplementary Table S2: Effect of APA and APB from PADF on xenografted tumor growth in MDA-MB-435 cells

| Group | Dose | Mice weight (g) | | Tumor weight |
|---|---|---|---|---|
| | mg/kg | Start | End | (g) |
| Saline | – | 20.2 ± 1.3 | 27.1 ± 1.0 | 1.41 ± 0.35 |
| APA | 150 | 20.8 ± 1.5 | 27.1 ± 0.9 | 0.68 ± 0.23* |
| APB | 150 | 21.4 ± 1.5 | 27.3 ± 1.1 | 1.35 ± 0.29 |

*$P < 0.05$, compared to tumor-bearing mice treated with saline.

### Supplementary Table S3: Effect of APA from PADF on xenografted tumor growth of MLF-7 cells

| Group | Dose | Mice weight (g) | | tumor |
|---|---|---|---|---|
| | mg/kg | Start | End | (g) |
| Non-tumor | – | 21.6 + 0.7 | 26.8 + 0.8 | – |
| Saline | – | 21.8 + 0.4 | 27.0 + 0.7 | 1.43 + 0.22 |
| CBT | 10 | 21.7 + 0.6 | 26.1 + 1.0 | 0.55 + 0.05** |
| APA | 20 | 22.1 + 0.5 | 27.4 + 1.1 | 1.03 + 0.16 |
| APA | 50 | 21.9 + 0.4 | 27.1 + 1.2 | 0.95 + 0.14* |
| APA | 150 | 21.8 + 0.6 | 27.9 + 1.1 | 0.71 + 0.12** |

*$P < 0.05$, compared to tumor-bearing mice treated with saline.

**Supplementary Table S4: Effect of APA from PADF on xenografted tumor growth of MDA-MB-435**

| Group | Dose | Mice | weight (g) | tumor weight |
|---|---|---|---|---|
| | mg/kg | Start | End | (g) |
| Non-tumor | – | 21.4 + 0.6 | 26.9 + 0.6 | – |
| Saline | – | 20.8 + 0.4 | 27.1 + 0.7 | 1.41 + 0.21 |
| CBT | 10 | 21.5 + 0.5 | 26.1 + 1.0 | 0.49 + 0.04** |
| APA | 20 | 21.1 + 0.5 | 27.2 + 1.3 | 1.01 + 0.15 |
| APA | 50 | 21.4 + 0.2 | 27.3 + 1.1 | 0.92 + 0.12 * |
| APA | 150 | 21.5 + 0.5 | 27.1 + 1.4 | 0.62 + 0.12 ** |

*$P < 0.05$, compared to tumor-bearing mice treated with saline.

**Supplementary Table S5: Effect of APAon serum indexes of liver function**

| Group | Dosage (mg/kg) | ALT (1U/L) | AST (1U/L) |
|---|---|---|---|
| Non-tumor | – | 118.9 ± 12.7 | 512.4 ± 30.6 |
| Saline | – | 117.9 ± 12.5 | 510.6 ± 23.1 |
| CBT | 10 | 293.1 ± 16.8* | 832.7 ± 24.9* |
| APA | 20 | 116.6 ± 10.9 | 515.7 ± 24.1 |
| APA | 50 | 120.9 ± 11.5 | 513.8 ± 20.9 |
| APA | 100 | 118.4 ± 12.9 | 518.7 ± 25.9 |
| APA | 150 | 119.4 ± 11.8 | 519.4 ± 24.7 |

*$P < 0.05$, compared to tumor-bearing mice treated with saline.

**Supplementary Table S6: Effect of APAon renal function indexes in tumor-bearing mice**

| Group | Dosage (mg/kg) | BUN (1U/L) | UA(1U/L) | CRE(1U/L) |
|---|---|---|---|---|
| Non-tumor | – | 6.88 ± 0.49 | 132.8 ± 9.7 | 46.10 ± 1.43 |
| Saline | – | 6.98 ± 0.45 | 133.6 ± 9.1 | 46 ± 1.78 |
| CBT | 10 | 11.98 ± 0.89* | 138.1 ± 8.9 | 64.78 ± 2.14* |
| APA | 20 | 6.87 ± 0.61 | 134.4 ± 8.6 | 45.10 ± 1.28 |
| APA | 50 | 6.79 ± 0.51 | 130.5 ± 9.2 | 46 ± 1.87 |
| APA | 100 | 6.84 ± 1.61 | 132.7 ± 9.4 | 46.32 ± 1.79 |
| APA | 150 | 6.86 ± 1.54 | 131.9 ± 9.6 | 45.89 ± 1.68 |

*$P < 0.05$, compared to tumor-bearing mice treated with saline.

**Supplementary Table S7: Effect of APAon WBC, RBC, HGB and PLT in tumor-bearing mice**

| Group | Dose | WBC ($10^9$/L) | RBC ($10^{12}$/L) | HGB (g/L) | PLT ($10^9$/L) |
|---|---|---|---|---|---|
| Non-tumor | | 6.12 ± 0.49 | 712 ± 0.23 | 97.8 ± 4.1 | 685.9 ± 41.2 |
| Saline | | 7.19 ± 0.62 | 7.36 ± 0.31 | 98.5 ± 4.2 | 701.9 ± 60.2 |
| CBT | 10 | 2.28 ± 0.44* | 7.27 ± 0.24 | 96.5 ± 3.7 | 695.9 ± 41.8 |
| APA | 20 | 7.99 ± 0.64 | 7.41 ± 0.15 | 98.4 ± 3.9 | 686.1 ± 48.9 |
| APA | 50 | 7.67 ± 0.63 | 7.01 ± 0.16 | 97.3 ± 4.4 | 671.1 ± 55.4 |
| APA | 100 | 7.25 ± 0.44 | 7.38 ± 0.18 | 98.7 ± 3.9 | 695.8 ± 53.2 |
| APA | 150 | 7.31 ± 0.39 | 7.41 ± 0.22 | 99.4 ± 4.1 | 699.1 ± 50.2 |

*$P < 0.05$, compared to tumor-bearing mice treated with saline.