**Supplemental Material-1 Dose response curves**

**π -π Conjugation Enhances Oligostilbene’s Antioxidant Capacity: Evidence from α-Viniferin and Caraphenol A**

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**Note:** This Supplemental Material provides the Dose response curves and IC50 values. The data with underline are cited in Fig. 3 in the main text.

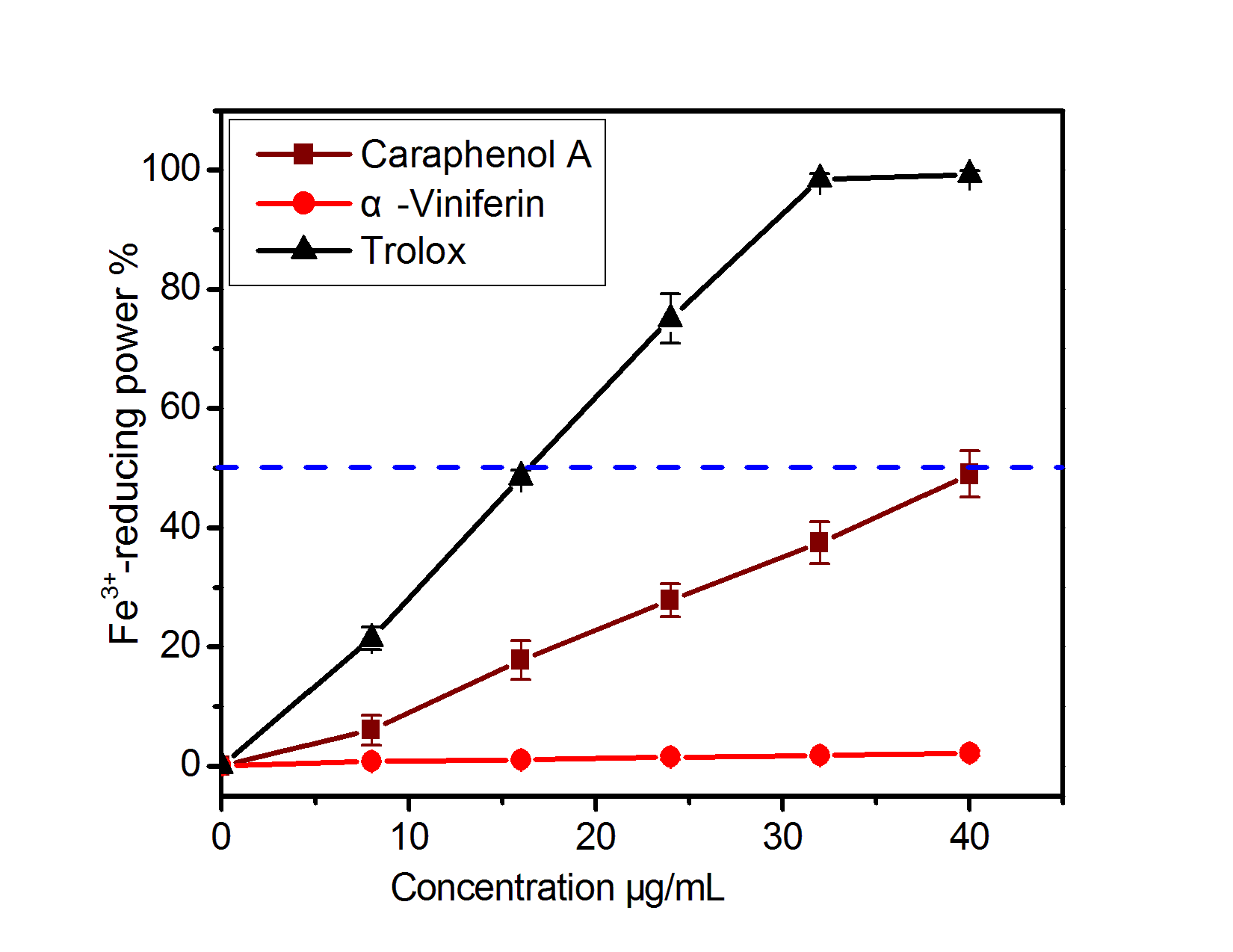


Figure S1**:** The dose response curves of α-viniferin and caraphenol A in FRAP assay. Trolox acts as the positive control. Each value is expressed as mean ± SD (n = 3).

Table. S1 The IC50 values of α-viniferin, caraphenol A, and Trolox in FRAP assay

|  |  |  |  |
| --- | --- | --- | --- |
|  | α-viniferin | caraphenol A | Trolox |
| IC50 value (μg/mL) | 1224.88±328.05 | 40.01±2.30 | 16.76±0.72 |
| IC50 value (μM) | 1804.75±483.35 c | 60.61±3.45a | 66.97±2.89 b |

The IC50 value (μg/mL) was obtained from Figure S1. Each value is expressed as mean ± SD (n = 3). The IC50 values (μM) in the same row with different letters (a, b, or c) are significantly (p < 0.05) different among α-viniferin, caraphenol A, and Trolox.

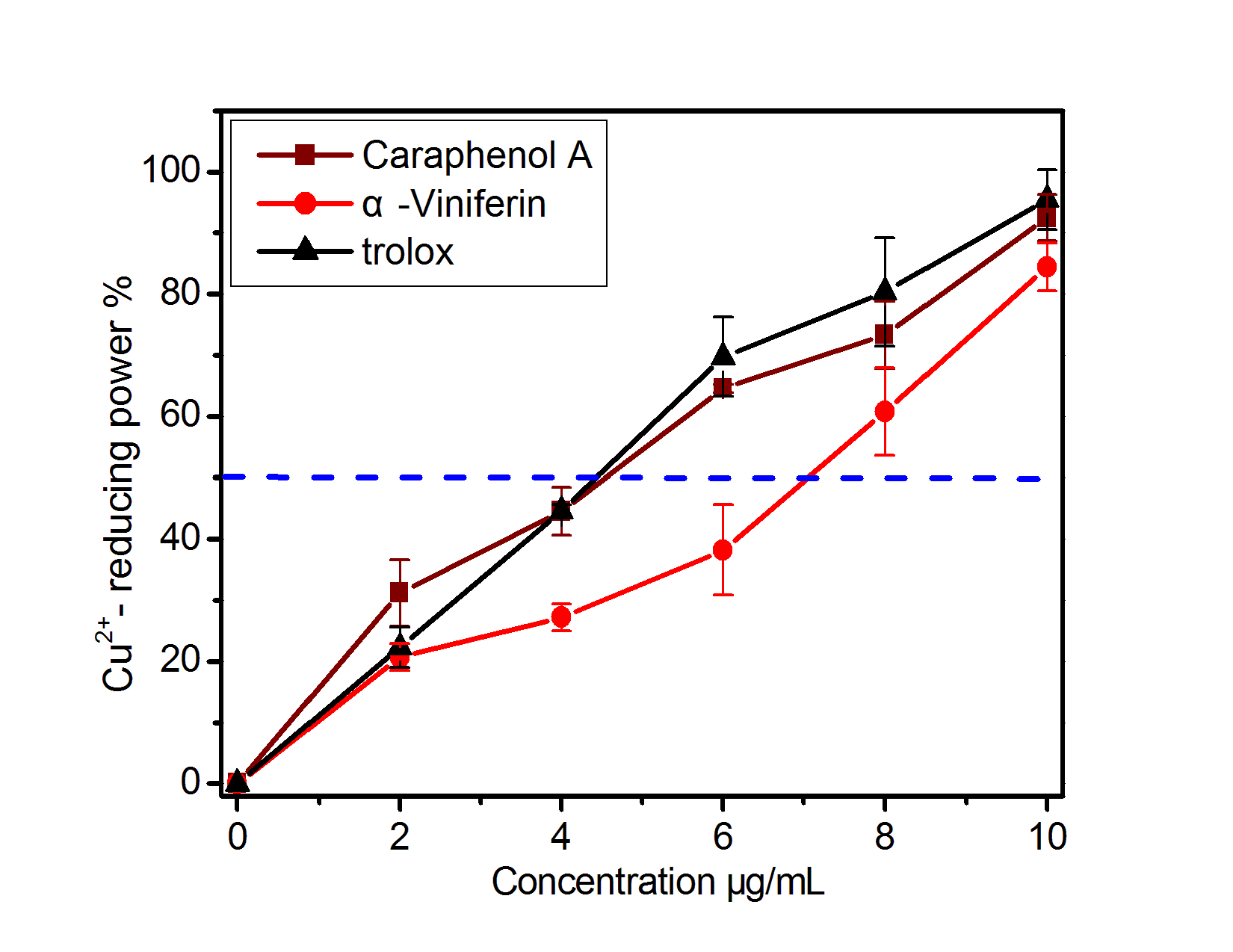


Figure S2**:** The dose response curves of α-viniferin and caraphenol A in Cu2+-reducing power (CUPRAC) assay. Each value is expressed as mean ± SD (n = 3).

Table. S2 The IC50 values of α-viniferin, caraphenol A, and Trolox in CUPRAC assay

|  |  |  |  |
| --- | --- | --- | --- |
|  | α-viniferin | caraphenol A | Trolox |
| IC50 value (μg/mL) | 6.47±0.40 | 3.74±0.27 | 4.64±0.15 |
| IC50 value (μM) | 9.53±0.59b | 5.53±0.40a | 18.54±0.59c |

The IC50 value (μg/mL) was obtained from Figure S2. Each value is expressed as mean ± SD (n = 3). The IC50 values (μM) in the same row with different letters (a, b, or c) are significantly (p < 0.05) different among α-viniferin, caraphenol A, and Trolox.

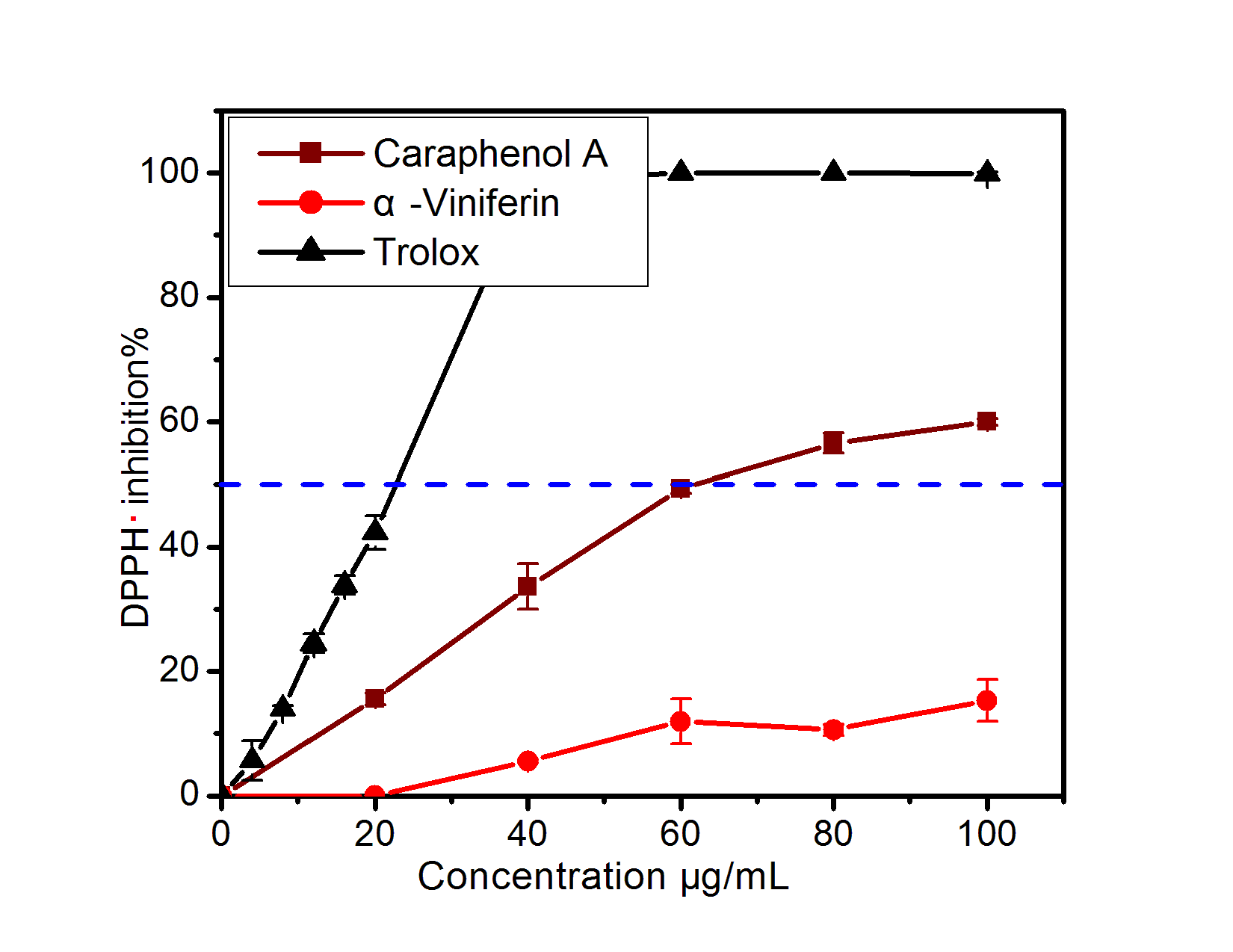


Figure S3**:** The dose response curves of α-viniferin and caraphenol A in DPPH•-scavenging assay. Each value is expressed as mean ± SD (n = 3).

Table. S3 The IC50 values of α-viniferin, caraphenol A, and Trolox in DPPH•-scavenging assay

|  |  |  |  |
| --- | --- | --- | --- |
|  | α-viniferin | caraphenol A | Trolox |
| IC50 value (μg/mL) | 340.67±72.31 | 72.49±0.49 | 22.84±0.74 |
| IC50 value (μM) | 501.94±106.55b | 107.00±0.73a | 91.28±231.49 a |

The IC50 value (μg/mL) was obtained from Figure S3. Each value is expressed as mean ± SD (n = 3). The IC50 values (μM) in the same row with different letters (a, b, or c) are significantly (p < 0.05) different among α-viniferin, caraphenol A, and Trolox.

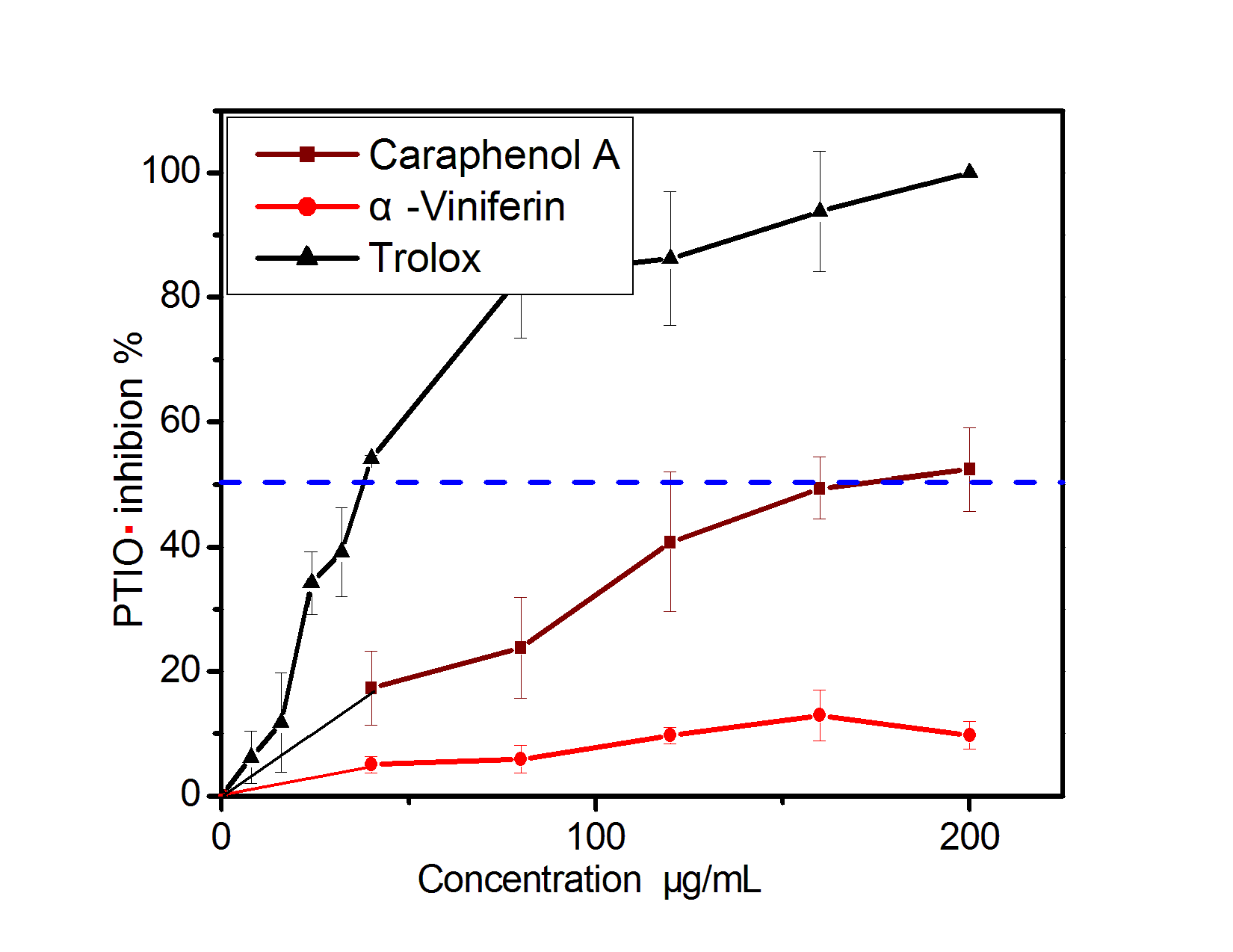


Figure S4**:** The dose response curves of α-viniferin and caraphenol A in PTIO•-scavenging assay. Each value is expressed as mean ± SD (n = 3).

Table. S4 The IC50 values of α-viniferin, caraphenol A, and Trolox PTIO•-scavenging assay

|  |  |  |  |
| --- | --- | --- | --- |
|  | α-viniferin | caraphenol A | Trolox |
| IC50 value (μg/mL) | 6.47±0.40 | 3.74±0.27 | 4.64±0.15 |
| IC50 value (μM) | 9.53±0.59b | 5.53±0.40a | 18.54±0.59c |

The IC50 value (μg/mL) was obtained from Figure S4. Each value is expressed as mean ± SD (n = 3). The IC50 values (μM) in the same row with different letters (a, b, or c) are significantly (p < 0.05) different among α-viniferin, caraphenol A, and Trolox.