

## ***E*-Configuration Improves Antioxidant and Cytoprotective Capacities of Resveratrols**

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**Note:** This Supporting information provides the original data of Table 1 in the main text. All data underline are mentioned in **Table 1** in the main text.

1. Superoxide anion ( $\bullet\text{O}_2^-$ ) scavenging assay

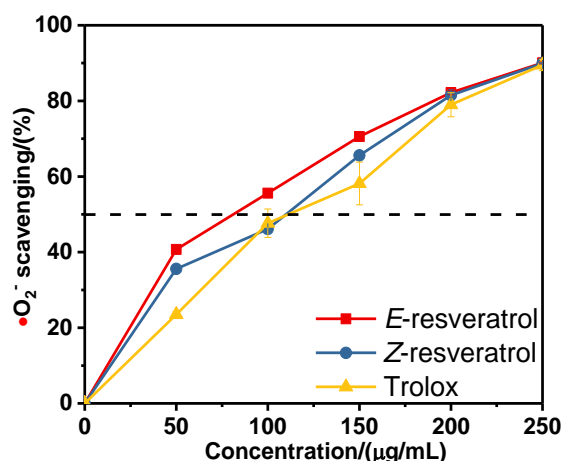


Fig. S3.1 The dose response curves of *E*-resveratrol and *Z*-resveratrol and the positive control in  $\bullet\text{O}_2^-$  scavenging assay.

Tab. S3.1 The comparison of  $\text{IC}_{50}$  values of *E*-resveratrol and *Z*-resveratrol and positive control in  $\bullet\text{O}_2^-$  scavenging assay.

	Mean $\pm$ SD $\mu\text{g/mL}$	Mean $\pm$ SD $\mu\text{M}$
<i>E</i> -resveratrol	78.8 $\pm$ 1.3	345.3 $\pm$ 5.5 <sup>a</sup>
<i>Z</i> -resveratrol	102.3 $\pm$ 1.1	448.2 $\pm$ 4.9 <sup>b</sup>
Trolox	127.0 $\pm$ 7.6	507.1 $\pm$ 30.4 <sup>c</sup>

$\text{IC}_{50}$  value was defined as the concentration of 50% superoxide anion radical inhibition and calculated by linear regression which was analyzed by Origin 6.0 professional software. Means values with different superscripts in the same column are significantly different ( $p < 0.05$ ).

2. Ferric-reducing antioxidant power (FRAP) assay ( $\text{Fe}^{3+}$ -Reducing)

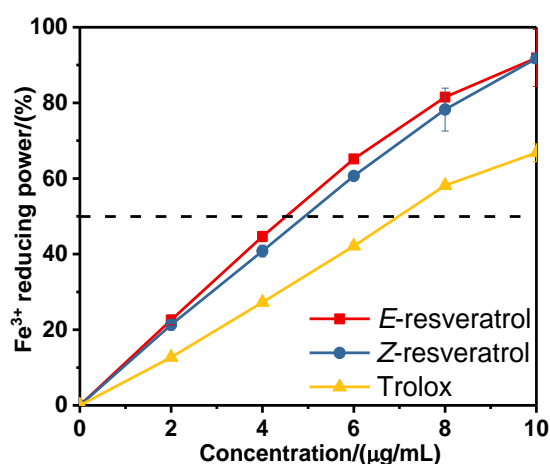


Fig. S3.2 The dose response curves of *E*-resveratrol and *Z*-resveratrol and the positive control in FRAP assay.

Tab. S3.2 The comparison of IC<sub>50</sub> values of *E*-resveratrol and *Z*-resveratrol and positive control in FRAP assay.

	Mean±SD μg/mL	Mean±SD μM
<i>E</i> -resveratrol	4.7±0.2	<u>20.7±0.7<sup>a</sup></u>
<i>Z</i> -resveratrol	5.0±0.2	<u>22.1±0.9<sup>b</sup></u>
Trolox	7.2±0.2	<u>28.9±0.8<sup>c</sup></u>

IC<sub>50</sub> value was defined as the concentration of 50% superoxide anion radical inhibition and calculated by linear regression which was analyzed by Origin 6.0 professional software. Means values with different superscripts in the same column are significantly different ( $p<0.05$ ).

### 3. Cupric ions (Cu<sup>2+</sup>) reducing antioxidant capacity (CUPRAC) assay

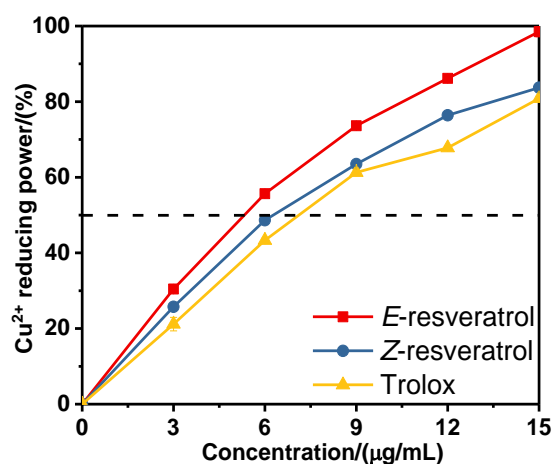


Fig. S3.3 The dose response curves of *E*-resveratrol and *Z*-resveratrol and the positive control in Cu<sup>2+</sup> reducing assay.

Tab. S3.3 The comparison of IC<sub>50</sub> values of *E*-resveratrol and *Z*-resveratrol and positive control in Cu<sup>2+</sup> reducing assay.

	Mean±SD μg/mL	Mean±SD μM
<i>E</i> -resveratrol	5.6±0.1	<u>24.5±0.3<sup>a</sup></u>
<i>Z</i> -resveratrol	7.0±0.1	<u>30.7±0.4<sup>b</sup></u>
Trolox	8.0±0.1	<u>31.9±0.3<sup>c</sup></u>

IC<sub>50</sub> value was defined as the concentration of 50% superoxide anion radical inhibition and calculated by linear regression which was analyzed by Origin 6.0 professional software. Means values with different superscripts in the same column are significantly different ( $p<0.05$ ).

### 4. PTIO•-scavenging assay (pH 4.5)

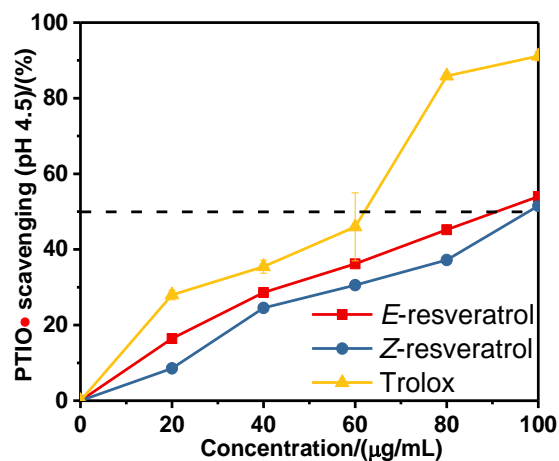


Fig. S3.4 The does response curves of *E*-resveratrol and *Z*-resveratrol and the positive control in PTIO•-scavenging assay (pH 4.5).

Tab. S3.4 The comparison of IC<sub>50</sub> values of *E*-resveratrol and *Z*-resveratrol and positive control in PTIO•-scavenging assay (pH 4.5).

	Mean±SD μg/mL	Mean±SD μM
<i>E</i> -resveratrol	90.4±0.9	<u>395.9±3.9<sup>b</sup></u>
<i>Z</i> -resveratrol	100.0±1.1	<u>436.3±4.9<sup>c</sup></u>
Trolox	51.8±1.6	<u>206.9±6.5<sup>a</sup></u>

IC<sub>50</sub> value was defined as the concentration of 50% superoxide anion radical inhibition and calculated by linear regression which was analyzed by Origin 6.0 professional software. Means values with different superscripts in the same column are significantly different ( $p < 0.05$ ).

#### 5. PTIO•-scavenging assay (pH 7.4)

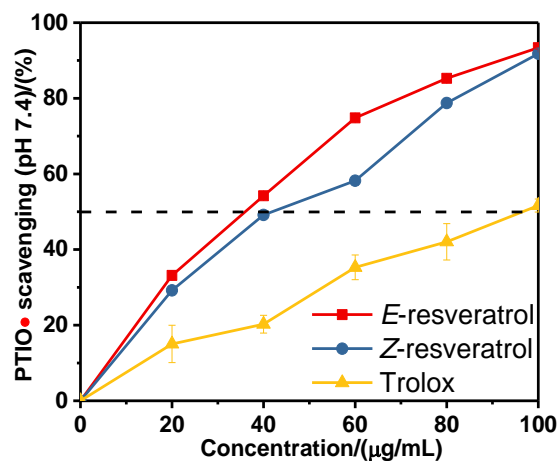


Fig. S3.5 The does response curves of *E*-resveratrol and *Z*-resveratrol and the positive control in PTIO•-scavenging assay (pH 7.4).

Tab. S3.5 The comparison of IC<sub>50</sub> values of *E*-resveratrol and *Z*-resveratrol and positive control in PTIO•-scavenging assay (pH 7.4).

	Mean±SD μg/mL	Mean±SD μM
<i>E</i> -resveratrol	36.0±0.7	<u>157.7±3.2<sup>a</sup></u>
<i>Z</i> -resveratrol	45.2±0.2	<u>198.2±0.9<sup>b</sup></u>
Trolox	96.1±2.2	<u>383.8±8.8<sup>c</sup></u>

IC<sub>50</sub> value was defined as the concentration of 50% superoxide anion radical inhibition and calculated by linear regression which was analyzed by Origin 6.0 professional software. Means values with different superscripts in the same column are significantly different ( $p<0.05$ ).

#### 6. DPPH•-scavenging assay

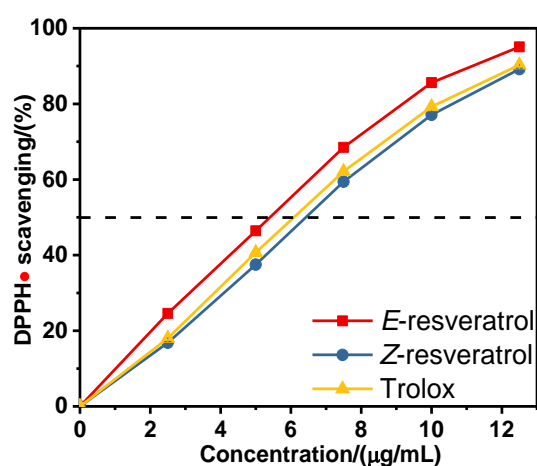


Fig. S3.6 The dose response curves of *E*-resveratrol and *Z*-resveratrol and the positive control in DPPH•-scavenging assay.

Tab. S3.6 The comparison of IC<sub>50</sub> values of *E*-resveratrol and *Z*-resveratrol and positive control in DPPH•-scavenging assay.

	Mean±SD μg/mL	Mean±SD μM
<i>E</i> -resveratrol	5.6±0.1	<u>24.3±0.1<sup>a</sup></u>
<i>Z</i> -resveratrol	6.7±0.1	<u>29.3±0.2<sup>c</sup></u>
Trolox	6.4±0.1	<u>25.6±0.2<sup>b</sup></u>

IC<sub>50</sub> value was defined as the concentration of 50% superoxide anion radical inhibition and calculated by linear regression which was analyzed by Origin 6.0 professional software. Means values with different superscripts in the same column are significantly different ( $p<0.05$ ).