

## Supplementary Material

### Thermal Inactivation Kinetics of Kudzu (*Pueraria lobata*)

### Polyphenol Oxidase and the Influence of Food Constituents

Table S1. Purification of PPO from kudzu

Purification step	Total activity (U)	Total protein (mg)	Specific activity (U/mg )	Recovery (%)	Purification (fold)
Crude extract	131,333 ± 1154	148.2 ± 2.4	886 ± 22	100.0 ± 0.9	1.0 ± 0.02
(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> precipitation	63,135 ± 852	13.9 ± 0.1	4,553 ± 71	48.1 ± 0.6	5.1 ± 0.1
DEAE sepharose fast flow column	43,200 ± 216	1.3 ± 0.04	34,001 ± 1123	32.9 ± 0.2	38.4 ± 1.3

Table S2. Change of constituent content in kudzu tissue, crude PPO (cPPO) solution, and

purified PPO (pPPO) solution

	Starch	Protein	Pectin	Sucrose
Kudzu tissue (/100g tissue)	$21.42 \pm 1.23$	$1.42 \pm 0.18$	$1.19 \pm 0.13$	$1.57 \pm 0.07$
cPPO solution (/100g of solution)	$0.37 \pm 0.05$	$0.71 \pm 0.04$	$0.51 \pm 0.02$	$0.58 \pm 0.09$
pPPO solution (/100g of solution)	— <sup>a</sup>	$0.11 \pm 0.02$	—	—

<sup>a</sup> —, not detected.

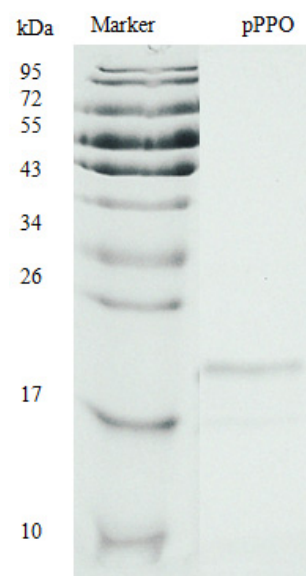


Figure S1. SDS-PAGE electrophoresis of the purified PPO

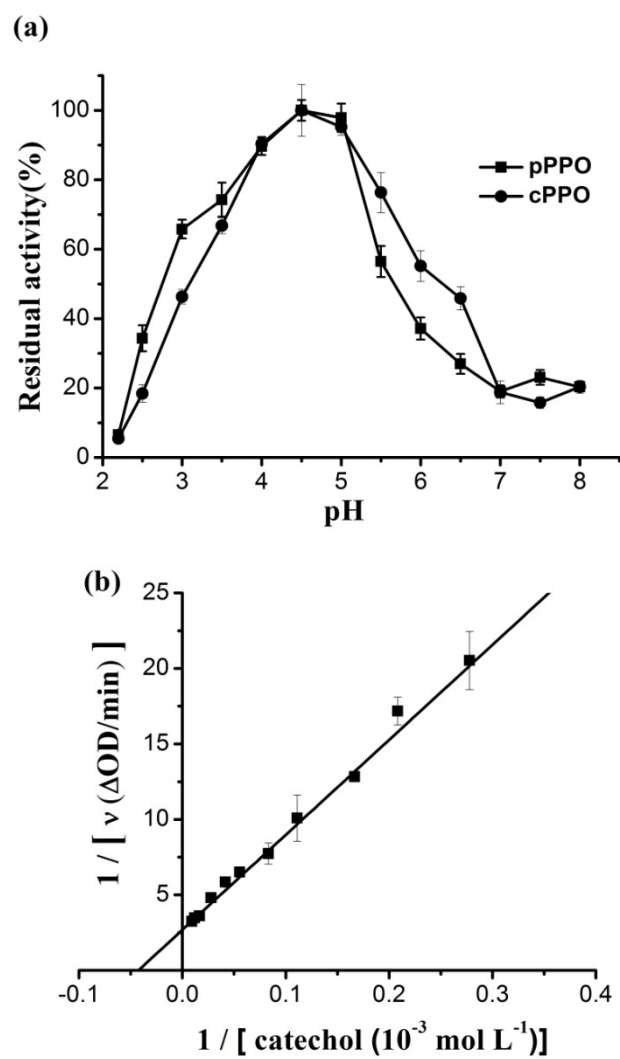


Figure S2. Effect of pH on PPO activity (a) and Lineweaver-Burk plots of PPO (b)