

One of the three independently performed experiments was taken as the example:

Table2 The original data for the calculation of content of individual detected phenolic compound.

Peak	Phenolic compounds	Peak area		Regression equations, R^2	Concentration ($\mu\text{g/mL}$) a		Content ($\mu\text{g}/100\text{ mg DW}$) b	
		Free	Bound		Free	Bound	Free	Bound
1	<i>p</i> -hydroxybenzoic acid	429806	882981	$y=161886x-29447, R^2=0.9998$	2.837	5.636	7.09	14.09
3	vanillic acid	750840	nc	$y=117274x+58743, R^2=0.9997$	5.902	nc	14.76	nc
4	caffeic acid	3079029	618172	$y=66215x-92574, R^2=0.9963$	47.899	10.734	119.75	26.84
5	ferulic acid	nc	1426223	$y=135104x-26427, R^2=0.9991$	nc	10.752	nc	26.88
2	catechin	587836	nc	$y=145677x-11855, R^2=0.9999$	4.117	nc	10.29	nc
6	rutin	986476	1365298	$y=67925x-38416, R^2=0.9949$	15.089	20.666	37.72	51.67
7	resveratrol	1747645	nc	$y=157070x-37540, R^2=0.9968$	11.366	nc	28.42	nc
8	quercetin	797173	737840	$y=221031x+61469, R^2=0.9981$	3.329	3.062	8.32	7.66

a The concentration of the phenolic compound was calculated from its regression equation, in which ‘y’ is the peak area and ‘x’ is the calculated concentration ($\mu\text{g/mL}$).

b The content of each detected phenolic compound was calculated from the formula (1):

$$\text{Content } (\mu\text{g}/100\text{ mg DW}) = c \times v/m \quad (1)$$

where: *c* is the concentration ($\mu\text{g/mL}$) of phenolic compound calculated from its regression equation based on its peak area; *v* is the volume (mL) of free or bound phenolic extract; *m* is the dry weight (g) of tartary buckwheat bran used for phenolics extraction.