S1 Table. Optimized conditions for assays of main enzymes in the flavonoid pathway of bilberry.

Enzyme	Crude extract (µl)	Buffer	(µl)	Substrate	(µl)	Cofactor	(µl)	Final volume (µl)	Stop reaction (µl)
PAL	40	0.1 M KPi + 0.4% Na-ascorbate, pH 8.5	55	(^{14}C)-phenylalanine (0.063 nmol)	5	-		100	200 EE* 10 HAC**
CHS/ CHI	40	0.1 M KPi + 0.4% Na-ascorbate, pH 7.5	50	(^{14}C)-malonyl-CoA (1.5 nmol) *p*-coumaroyl-CoA (1 nmol)	5 5	-		100	200 EE 10 HAC
FHT	30	0.1 M Tris/HCl + 0.4 % Na-ascorbate, pH 7.5	60	(^{14}C)-naringenin (0.036 nmol)	-	2-oxoglutarate (1.46 mg/ml H_2O) $FeSO_4 \times 7\ H_2O$ (0.56 mg/ml H_2O)	5 5	100	70 EE 10 HAC
DFR	20	0.1 M KPi + 0.4% Na-ascorbate, pH 6.5	25	(^{14}C)-DHM/ DHQ/ DHK (0.036 nmol)	-	NADPH (4.18 mg/100 µl H_2O)	5	50	70 EE

*EE ethyl acetate

**HAC acetic acid