

## Supporting information to the article

### Purification and Characterization of Latent Polyphenol oxidase from apricot (*Prunus armeniaca* L.)

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#### Table of contents :

**Table S1:** List of identified peptide sequences of L-*Pa*PPO (Asp<sup>102</sup>→Ser<sup>597</sup>).

**Table S2:** List of identified peptide sequences of A-*Pa*PPO (Asp<sup>102</sup>→Arg<sup>430</sup>).

**Figure S1:** Michaelis-Menten diagrams for the four tested di- and triphenols.

**Figure S2:** Cuvettes of the activity test with tyramine for *Pa*PPO after storage (A-*Pa*PPO).

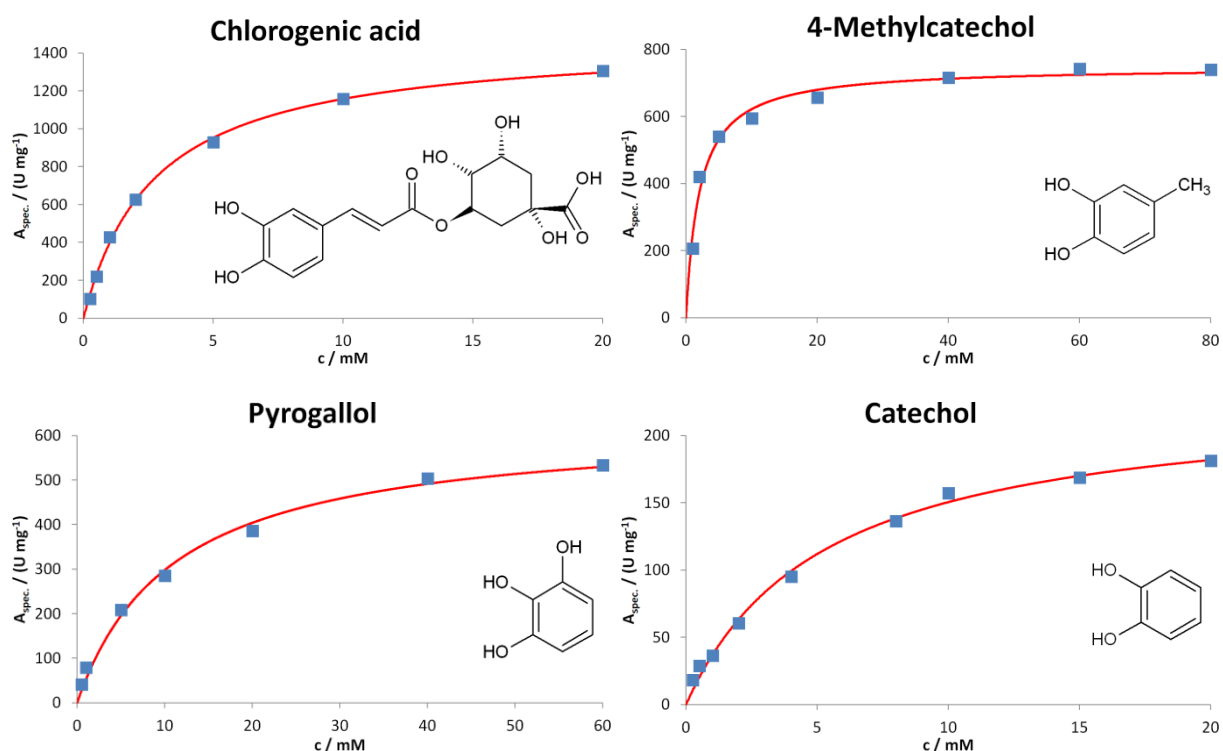
**Figure S3:** ESI LTQ Orbitrap Velos mass spectra of A-*Pa*PPO.

**Table S1: List of identified peptide sequences of L-PaPPO (Asp<sup>102</sup>→Ser<sup>597</sup>).**

	positions	Identified peptide sequences	Mass (Da)
Main domain peptides	135 - 147	K.IKTFKPDLSIPLR.T	1527.92
	137 - 147	K.TFKPDLSIPLR.T	1286.74
	172 - 180	R.ALPDPPPMSMVQQAQ.V	898.42
	172 - 186	R.ALPDPPPMSMVQQAQ.V	1686.80
	220 - 227	R.MYLYFYER.I	1184.54
	270 - 286	R.NADHQPPVLVDLSYGGK.D	1809.91
	270 - 295	R.NADHQPPVLVDLSYGGKDDDDVDEQTR.I	2883.33
	270 - 305	R.NADHQPPVLVDLSYGGKDDDDVDEQTRIDENLAIMYR.Q	4101.95
	287 - 305	K.DDDVDEQTRIDENLAIM(+15.99 Da)YR.Q	2327.03
	296 - 305	R.IDENLAIMYR.Q	1237.62
	306 - 323	R.QMVGSAKTPDLFFGHAYR.A	2025.00
	313 - 323	K.TPDLFFGHAYR.A	1323.64
	381 - 386	R.MWNIWK.T	877.43
	419 - 427	K.VRDSLEPEK.Q	1072.56
419 - 430	K.VRDSLEPEKQLR.Y	1469.80	
421 - 430	R.DSLEPEKQLR.Y	1214.63	
Peptides of the C-terminal domain	431 - 448	R.YNYEPVSLPWLFTKPTAR.K	2182.10
	458 - 466	K.VAATQLTSK.F	918.52
	458 - 485	K.VAATQLTSKFPATLVEVTTVEVARPKPR.K	3009.71
	467 - 485	K.FPATLVEVTTVEVARPKPR.K	2110.20
	490 - 502	K.KEKVDEEELLIK.D	1585.90
	491 - 502	K.EKVDEEELLIK.D	1457.81
	491 - 513	K.EKVDEEELLIKDIEFEGTEAVK.F	2676.38
	493 - 502	K.VDEEELLIK.D	1200.67
	493 - 513	K.VDEEELLIKDIEFEGTEAVK.F	2419.25
	503 - 513	K.DIEFEGTEAVK.F	1237.59
	503 - 527	K.DIEFEGTEAVKFDVFINDDAESLSR.R	2846.34
	514 - 527	K.FDVFINDDAESLSR.R	1627.76
	514 - 528	K.FDVFINDDAESLSRR.D	1783.86
	528 - 544	R.RDKSEFAGSFVHVPQGK.T	1888.96
	529 - 544	R.DKSEFAGSFVHVPQGK.T	1732.86
	529 - 547	R.DKSEFAGSFVHVPQGKTTK.A	2063.05
	531 - 544	K.SEAGSFVHVPQGK.T	1489.74
	556 - 580	K.LGITDLLEDLGAEDDSSVLVTLVPR.V	2640.39
581 - 592	R.VSNSPITIGGFK.I	1219.66	
581 - 597	R.VSNSPITIGGFKIEYSS	1798.92	

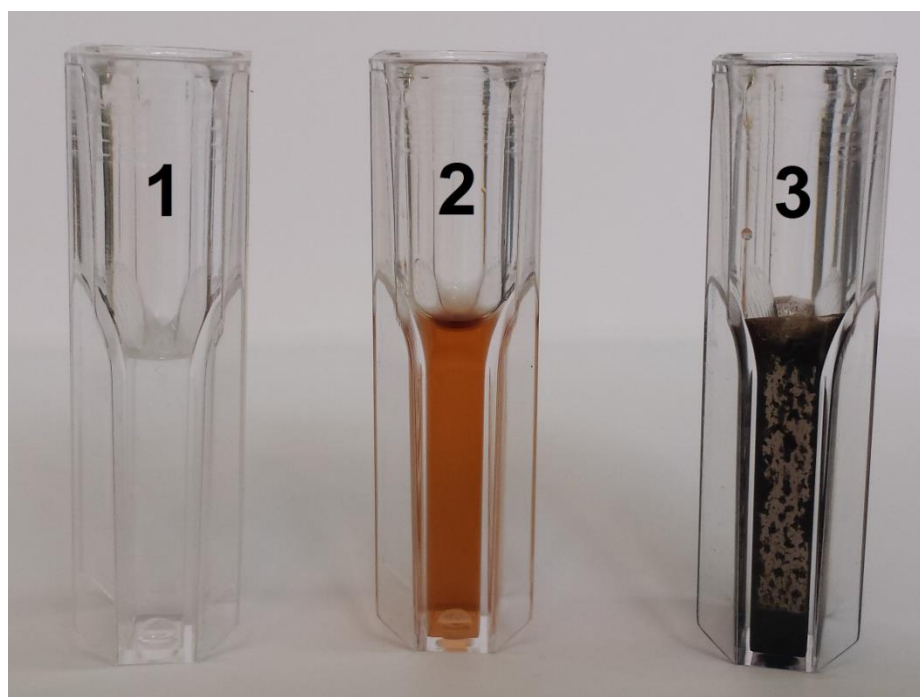
**Table S2: List of identified peptide sequences of A-PaPPO (Asp<sup>102</sup>→Arg<sup>430</sup>).**

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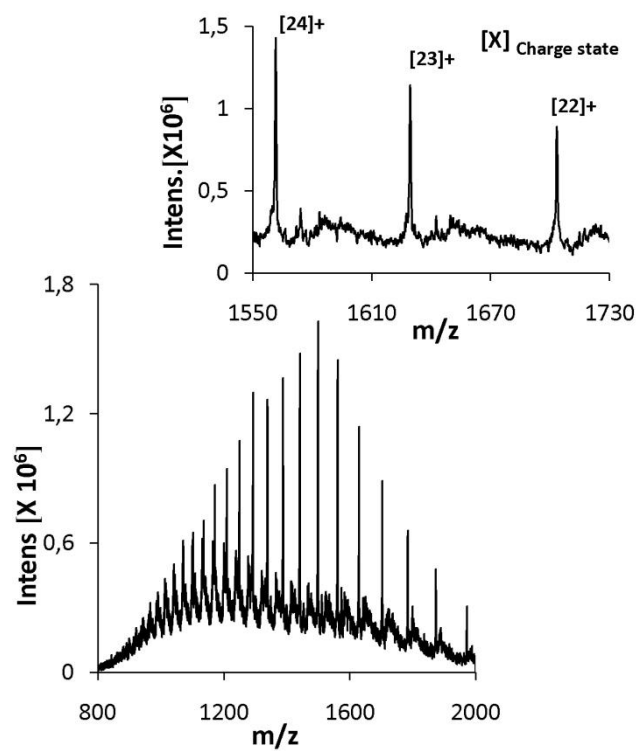
**Figure S1: Michaelis-Menten diagrams for the four tested di- and triphenols.**

Blue squares represent the average of three measured slopes. Reaction rates predicted using the least-squares optimized parameters of the Michaelis-Menten models are shown as red curves.



**Figure S2: Cuvettes of the activity test with tyramine for *PaPPO* after storage (*A-PaPPO*).**

The activity test was run with 4 mM of tyramine in citrate buffer (pH 4.5). (1) Blank (sodium citrate buffer pH 4.5 + 4 mM tyramine), (2) *A-PaPPO* and tyramine after 3 hours, (3) *A-PaPPO* and tyramine after one day. The cuvette (3) shows the formation of a precipitate (melanin) after one day of reaction.



**Figure S3: ESI LTQ Orbitrap Velos mass spectra of A-PaPPO.**

Entire mass spectrum of A-PaPPO. Panel: Zoomed section of charge states  $[M + 22 H]^{22+}$  to  $[M + 24 H]^{24+}$ .