

QID41594.1	-----MASLSPPATTTTTNISSLQPSPLFHKASQVSLVGKR	37
XP_010647098.3	MSVHYKRKEGPRPFSYPYRLISTMASLSPPAT-TTTTNISSLQPSPLFHKASQVSLVGKR	59
XP_059596123.1	-----MASLPWSLTTSTAIANTTNISALPPSPLFHRVSHVPIARNR	41
NP_001268045.1	-----MASLPWSLTTFTAIANTTNISAFPPSPLFQRASHVVPVARNR	41
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QID41594.1	NPRFVRRVVS CNATNGDERSTSSSKSGESPLGKLDRRNVLGLGGLYGV-SGLGAADPFA	96
XP_010647098.3	NPRFVRRVVS CN ATNGDERSTSSSKSGESPLGKLDRRNVLGLGGLYGV-SGLGAADPFA	118
XP_059596123.1	SRRFAPSKVSC NAANGDPNSDSTSIRETSPGKLDRRNVLGLGGLYGAAGLGATKPLA	101
NP_001268045.1	SRRFAPSKVSC NSANGDPNSDSTSIVRETSSGKLDRRNVLGLGGLYGAAGLGATKPLA	101
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QID41594.1	FAAPISPPDLSECGAADLPAGAQTNCPPVSSKIIDFKLLPKNSPLRIRPAHLASKEY	156
XP_010647098.3	FAAPISPPDLSECGAADLPAGAQTNCPPVSSKIIDFKLLPKNSPLRIRPAHLASKEY	178
XP_059596123.1	FGAPIQAPDISKCGTATVPDGVTPXNCCPPVTTKIIDFQLPSSGSPMRTRPAHLVSKY	161
NP_001268045.1	FGAPIQAPDISKCGTATVPDGVTPXNCCPPVTTKIIDFQLPSSGSPMRTRPAHLVSKY	161
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QID41594.1	IAKYKK AIELMKALPDDDP RSFMQQADVHCAYCNGAYHQVGFDPDLQVHNSWLFLPYHR	216
XP_010647098.3	IAKYKK AIELMKALPDDDP RSFMQQADVHCAYCNGAYHQVGFDPDLQVHNSWLFLPYHR	238
XP_059596123.1	LAKYKKAIELQ KALPDDDP RSFKQQANVHCTYCOGAYDQVGYTDLELQVHASWLFLPFHR	221
NP_001268045.1	LAKYKKAIELQ KALPDDDP RSFKQQANVHCTYCOGAYDQVGYTDLELQVHASWLFLPFHR	221
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QID41594.1	YYLYFYEKILGKLLINDPTFALPFWNWDAPAGMQMPAMFADPNSPDYDKLRDAKHQPPK LI	276
XP_010647098.3	YYLYFYEKILGKLLINDPTFALPFWNWDAPAGMQMPAMFADPNSPDYDKLRDAKHQPPK LI	298
XP_059596123.1	YYLYFNERILAKLIDDPITFALPYAWNDPDMYPTIYASSPSSLYDEKRNKHLPTVI	281
NP_001268045.1	YYLYFNERILAKLIDDPITFALPYAWNDPDMYPTIYASSPSSLYDEKRNKHLPTVI	281
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QID41594.1	DL DYNL TDS NDT NEQQISS NLSIMYRQIVSSAK TTSLFMGAAYR AGDEPDGQGTLENIP	336
XP_010647098.3	DL DYNL TDS NDT NEQQISS NLSIMYRQIVSSAK TTSLFMGAAYR AGDEPDGQGTLENIP	358
XP_059596123.1	DLDYDGTTESTIPDDELKTDNLAIMYKQIVSGATTPKFLGYPYRAGDAIDPGAGTLEHVP	341
NP_001268045.1	DLDYDGTTESTIPDDELKTDNLAIMYKQIVSGATTPKFLGYPYRAGDAIDPGAGTLEHVP	341
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QID41594.1	HGPVHIWCGDRTQPNIEDMGNFYSAAR DP IFFSHSNVDRMWTVWVWGLGGK-RKDFDTPD	395
XP_010647098.3	HGPVHIWCGDRTQPNIEDMGNFYSAAR DP IFFSHSNVDRMWTVWVWGLGGK-RK DFDTPD	417
XP_059596123.1	HNIVHKWTGLADKP-SEDMGNFYTAGRDPDIFFGHANVDRMWNWIKTIGGKNRKDFDTPD	400
NP_001268045.1	HNIVHKWTGLADKP-SEDMGNFYTAGRDPDIFFGHANVDRMWNWIKTIGGKNRKDFDTPD	400
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QID41594.1	WLDAGFVFDENALIRVKVRDCLDPTKLRYAYQEVDIPWLKSRPKPRQILKVVNKLKH	455
XP_010647098.3	WLDAGFVFDENAL VRVKVRDCLDPTKLRYAYQEVDIPWLKSRPKPRQILKVVNKLKH	477
XP_059596123.1	WLDATFVFDENKQLVKVKVSDCVDTSKLRYQYQDIPWLPKNTKAKAK- ---TTTKSS	456
NP_001268045.1	WLDATFVFDENKQLVKVKVSDCVDTSKLRYQYQDIPWLPKNTKAKAK- ---TTTKSS	456
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QID41594.1	KSGVANAAEIPSS--SSIVFPIKLDSTLRVDVPRPKRSRKEKEDEEEVLVIKGIIELE	512
XP_010647098.3	KSGVANAAEIPSS--SSIVFPIKLDSTLRVDVPRPKRSRKEKEKEDEEEVLVIKGIIELE	534
XP_059596123.1	KSGVAKAAELPKTTISSIGDFPKALNSVIRVEVPRPKRSRKEKEKEDEEEVLLIKGIELD	516
NP_001268045.1	KSGVAKAAELPKTTISSIGDFPKALNSVIRVEVPRPKRSRKEKEKEDEEEVLLIKGIELD	516
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QID41594.1	RDKFVKFDIFINDEDDPVSRPDNEFAGSFVNVPHQHSHGKKNTILR IGISELLEDLEA	572
XP_010647098.3	RDKFVKFDIFINDEDDPVSRPDNEFAGSFVNVPHQHSHGKKNTILR IGISELLEDLEA	594
XP_059596123.1	RENFKFDVYINDEDYSVSRPKNSEFAGSFVNVPHKHMKEMKTKTNLRFAINELLEDLGA	576
NP_001268045.1	RENFKFDVYINDEDYSVSRPKNSEFAGSFVNVPHKHMKEMKTKTNLRFAINELLEDLGA	576
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QID41594.1	EDD SVV VT L VPR YGADVITIGGIEIELAS- 602	
XP_010647098.3	EDD SVV VT L VPR YGADVITIGGIEIELAS- 624	
XP_059596123.1	EDDESIVTIVPRAGDDVTIGGIEIEFVSD 607	
NP_001268045.1	EDDESIVTIVPRAGDDVTIGGIEIEFVSD 607	
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Figure S1. Mapping of identified peptides on multiple sequence alignment of grapevine PPOs. The sequence of the peptides identified by LC-MS/MS are marked in red. The thylakoid signal peptide sequence is shaded in black.