

Figure S1: Sequences matched by X!Tandem to peptide nanoLC-MS/MS data. Underlined residues indicate sequence coverage by nanoLC-MS/MS data.

Band 1: gi|33329392| class IV chitinase [Vitis vinifera]

1	MAAKLLTVLLVGALFGAAVA <u>QNCGCASGLCCSKYGYCGTGSDYCGDGCQSGPCDSSSGSG</u>	60
61	SSVSDIVTQSFDDGIINQAASSCAGKNFYTRAAFLSALNSYSGFGNDGSTDANKREIAAF	120
121	FAHVTHETGHFCYIEEINGASHNYCDSSNTQYPCVSGQNYGRGPLQLTWNVNYGAAGNS	180
181	IGFNGLSNPGIVATDVVTSFKTALWFWMNNVHVS <u>VIGQGFATIRAINGAVECNGGNTAAV</u>	240
241	<u>NARVQYYKDYCSQLGVSPGDNLTC</u>	264

Band 2: gi|259146784| Bgl2p [*Saccharomyces cerevisiae* EC1118]

1	MRFSTTLATAATALFFTASQVSA <u>IGELAFNLGVKN</u> NDGTCKSTSDYETELQALKSYTSTV	60
61	KVYAASDCNTLQNLGPAAEAEGFTIFVGVWPTDDSHYAAEK <u>AALQTYLPKIKESTVAGFL</u>	120
121	<u>VGSEALYRNDLTASQLSDKINDVRSVVADISDSGKSYSGKQVGTVDSWNVLVAGYNSAV</u>	180
181	IEASDFVMANAFSYWQGQTMQNASYSFFDDIMQALQVIQSTKGSTDITFWVGETGWPTDG	240
241	TNFESSYPSVDNAKQFWKEGICSMRAWGVNVIVFEAFDEDWKPNTSGTSDVEKHWGVFTS	300
301	SDNLKYSLCDDFS	313

Band 3a: gi|33329392| class IV chitinase [Vitis vinifera]

1	MAAKLLTVLLVGALFGAAVA <u>QNCGCASGLCCSKYGYCGTGSDYCGDGCQSGPCDSSSGSG</u>	60
61	SSVSDIVTQSFDDGIINQAASSCAGKNFYTRAAFLSALNSYSGFGNDGSTDANKREIAAF	120
121	FAHVTHETGHFCYIEEINGASHNYCDSSNTQYPCVSGQNYGRGPLQLTWNVNYGAAGNS	180
181	IGFNGLSNPGIVATDVVTSFKTALWFWMNNVHVS <u>VIGQGFATIRAINGAVECNGGNTAAV</u>	240
241	<u>NARVQYYKDYCSQLGVSPGDNLTC</u>	264

Band 3b: gi|33329392| class IV chitinase [Vitis vinifera]

1	MAAKLLTVLLVGALFGAAVA <u>QNCGCASGLCCSKYGYCGTGSDYCGDGCQSGPCDSSSGSG</u>	60
61	SSVSDIVTQSFDDGIINQAASSCAGKNFYTRAAFLSALNSYSGFGNDGSTDANKREIAAF	120
121	FAHVTHETGHFCYIEEINGASHNYCDSSNTQYPCVSGQNYGRGPLQLTWNVNYGAAGNS	180
181	IGFNGLSNPGIVATDVVTSFKTALWFWMNNVHVS <u>VIGQGFATIRAINGAVECNGGNTAAV</u>	240
241	<u>NARVQYYKDYCSQLGVSPGDNLTC</u>	264

Band 3c: gi|33329392| class IV chitinase [Vitis vinifera]

1	MAAKLLTVLLVGALFGAAVA <u>QNCGCASGLCCSKYGYCGTGSDYCGDGCQSGPCDSSSGSG</u>	60
61	SSVSDIVTQSFDDGIINQAASSCAGKNFYTRAAFLSALNSYSGFGNDGSTDANKREIAAF	120
121	FAHVTHETGHFCYIEEINGASHNYCDSSNTQYPCVSGQNYGRGPLQLTWNVNYGAAGNS	180
181	<u>IGFNGLSNPGIVATDVVTSFKTALWFWMNNVHVSIGQGFATIRAINGAVECNGGNTAAV</u>	240
241	<u>NARVQYYKDYCSQLGVSPGDNLTC</u>	264

Band 4: gi|33329392| class IV chitinase [Vitis vinifera]

1	MAAKLLTVLLVGALFGAAVA <u>QNCGCASGLCCSKYGYCGTGSDYCGDGCQSGPCDSSSGSG</u>	60
61	SSVSDIVTQSFDDGIINQAASSCAGKNFYTRAAFLSALNSYSGFGNDGSTDANKREIAAF	120
121	FAHVTHETGHFCYIEEINGASHNYCDSSNTQYPCVSGQNYGRGPLQLTWNVNYGAAGNS	180
181	IGFNGLSNPGIVATDVVTSFKTALWFWMNNVHVS <u>VIGQGFATIRAINGAVECNGGNTAAV</u>	240
241	<u>NARVQYYKDYCSQLGVSPGDNLTC</u>	264

Band 5: gi|33329392| class IV chitinase [Vitis vinifera]

1 MAAKLLTVLLVGALFGAAVAQNCGCASGLCCSKYGYCGTGS⁶⁰SDYCGDGCQSGPCDSSSSGSG
61 SSVSDIVTQSF¹²⁰FDGIINQAASSCAGKNFYTRAAFLSALNSYSGFGNDGSTDANKREIAAF
121 FAHVTHETGHFCYIEEINGASHNYCDSSNTQYPCVSGQNY¹⁸⁰YGRGPLQLTWNYN¹⁸⁰YGAAGNS
181 IGFNGLSNPGIVATDVVTSFKTALWFWMNNVH²⁴⁰SVIGQGF²⁴⁰GATIRAINGAVECNGGNTAAV
241 NARVQYYKDYCSQLGVSPGDNLTC 264

Band 6: gi|225441373| Exo-beta-1,3-glucanase [Vitis vinifera]

1 MAKLYSAGKSPRMAAMLLLFGLLMASLEITGAQIGVCYGRNGNNL⁶⁰PAPGEVVALYNQYN
61 IRRMRLYDTRQDALQALGGSNIELILGVPNDNLQNIASSQANADSWVQDN¹²⁰IKNHLNVKFR
121 YIAVGNEVSPSGAQAQFVLPAMQNINNAISSAGLGNQIKVSTAIDT¹⁸⁰GV¹⁸⁰LGVSYPPSSGSF
181 KSGVLSFLT²⁴⁰SIISFLVKNNAPLL²⁴⁰VNL²⁴⁰YPYFSDLSNLNYALFTAPGVVVQD²⁴⁰QGLGYKNLFD
241 AILD³⁰⁰AVYSALERAGGSSLKIVVSESGWPSAGGTOTTVDNARTYNSNLIQHV³⁰⁰KGGTPKRPT
301 GPIETYVFAMFDEDNKTPELEKHWGLFLPNKQPKYTINFN 340

Band 7: gi|33329392| class IV chitinase [Vitis vinifera]

1 MAAKLLTVLLVGALFGAAVAQNCGCASGLCCSKYGYCGTGS⁶⁰SDYCGDGCQSGPCDSSSSGSG
61 SSVSDIVTQSF¹²⁰FDGIINQAASSCAGKNFYTRAAFLSALNSYSGFGNDGSTDANKREIAAF
121 FAHVTHETGHFCYIEEINGASHNYCDSSNTQYPCVSGQNY¹⁸⁰YGRGPLQLTWNYN¹⁸⁰YGAAGNS
181 IGFNGLSNPGIVATDVVTSFKTALWFWMNNVH²⁴⁰SVIGQGF²⁴⁰GATIRAINGAVECNGGNTAAV
241 NARVQYYKDYCSQLGVSPGDNLTC 264

Figure S2. NuPAGE (10% Bis-tris) of purified proteins (F1 and I) after variable length heat test (from 0 to 120 minutes at 80 °C) performed in model wine. After heat test proteins were precipitated with 5 volumes of cold ethanol and obtained pellets were dissolved in 20 μ L of loading buffer. Proteins were reduced with 5% 2-mercaptoethanol. Several protease inhibitors (Pepstatin, E64, Benzanidine, Batracine and a cocktail of all four) were added to proteins F1 and I during heat test. Pellets were electrophoresed and all showed the same degradation profile, indicating the absence of endogenous proteases in the purified protein fractions (not shown).

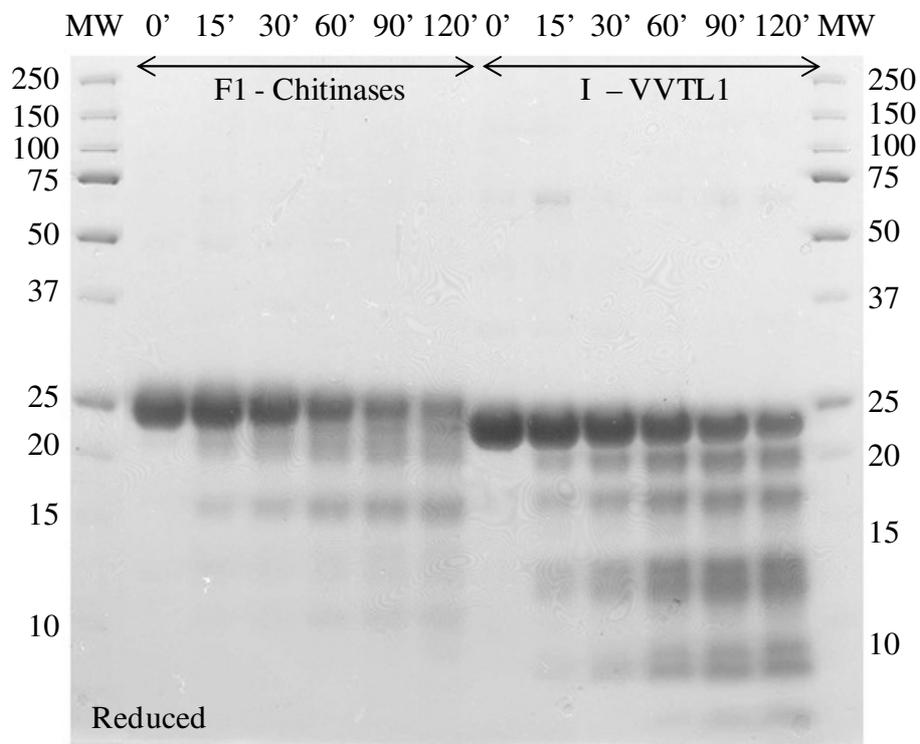


Figure S3. NuPAGE (10% Bis-tris) of purified proteins after heat test in model wine. Each sample was centrifuged (15000 g, 4 °C, 15 min) and the obtained pellet washed with model wine. Proteins from 200 µL for supernatants (S) and pellets (P) were loaded per lane. F1 and I: unheated standard proteins. Proteins were reduced with 5% 2-mercaptoethanol.

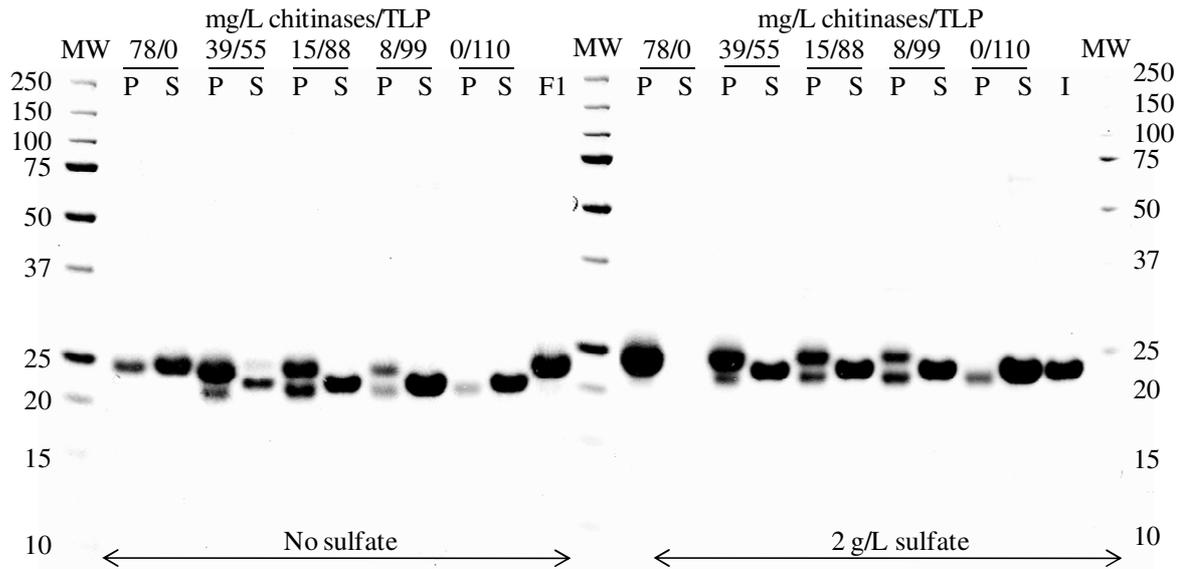


Figure S4. DSC scans of purified proteins in model wine (green line) and UF wine (Sauvignon blanc, red dashed line).

