

Table S1: Peptide sequences employed to identify PdPV1 subunits.

PdPV1-1 (PV1-A1) Pdi67619_c0_g1	PdPV1-2 (PV1-A2) Pdi37843_c0_g1	PdPV1-3 (PV1-A3) Pdi14773_c0_g1	PdPV1-4 (PV1-A4) Pdi37785_c0_g1	PdPV1-5 (PV1-B1) Pdi118877_c0_g1	PdPV1-6 (PV1-B3) Pdi33234_c0_g1
-	XDEY(G)IMEINPPXXVSQ	(S)QEYLLLDHEASTQ	-	EXXMHDLVV	
TFIDSPNK	VSVTPAEDMVDTMQK	SKPTPLQDMADLMEEIGVGWPK	SPQEIRDEMKDTEVLYSFK	QYDSEFK	MNLKDNEITPVIQLEER
SVEDYKDMILKEVDLVYSFK	VSVTPAEDMVDTMQK	QNLDLASNTGIDVLGGPGNAR	SPQEIRDEMKDTEVLYSFK	NKISFVQLR	GQTLQQYEAEKL
SVEDYKDMILK	VSVTPAEDMVDTMQK	IYFFINIPR	YYIIFYEVKDSEK	YLAVVREPFLTR	
SVEDYKDMILK	VSEQEILNMLSPLEIKHK	HLIVVKQNDLNLEK	MYIYINIPLDEVDDFASK	VYISSGFPK	
SKSVEDYKDMILK	EGVDIWGGPGEYHVKPEYLIR	ANGAYPPK	MVPVVDMFDLAK	TTLIKYTPSLK	
TLKFEGETQGAISHVQAYGEKIK	ATGVTPHIKHFFFVSSAR	TSVQYLT	TKMVPVVDMFDLAK	TLKQYDSEFKR	
TLKFEGETQGAISHVQAYGEK	KVSEQEILNMLSPLEIKHK	TMEQYMSEK	TLPLEGLTTQQSR	TLKQYDSEFK	
FEGETQGAISHVQAYGEK	HFFFVSSARDEVIEIGR	TMEQYMSEK	MYIYINIPLDEVDDFASK	GLFVKELGTSK	
EVDLVYNSFKVVGSSR	LDPVGYMK		GFMEEIKDSFQK	CLNTALKDYPK	
EVDLVYNSFK	HFFFVSSAR		GFMEEIKDSFQK	GLFVKELGTSKYLA	VVR
INLPGDVISIAVGDLNDK			DEMKDTEVLYSFK	LEISVPPSK	
INLPGDVISIAVGDLNDKMR			DEMKDTEVLYSFK	KLEISVPPSK	
INLPGDVISIAVGDLNDKMR			ALGAPSYQIVVEVNSLNL	NKISFVQILRLEN	
IKTFIDSPNKGFYPLGR			AFYTNGSSPK		
SKSVEDYKDMILK			YYIIFYEVKDSEKSPQEIR		
MNESSYEK			KLEEVELKGK		
MNESSYEK			KLEEVELK		
			YYIIFYEVK		

Subunit names in parenthesis correspond to the general nomenclature adopted for Ampullariid PV1s followed by the unigene IDs taken from Ip et al. (2018). N-terminal sequences (bold) and internal aminoacid sequences of PdPV1 subumits were obtained by Edman degradation and MS/MS, respectively.

Figure S1: Subunit sequences of PdPV1.

A**PdPV1-1** (Pdi67619_c0_g1)

MLVATLILVALSAVFTNVYASCQYIILDVNKVKSKSVEDYKDMLEKVDLVYSFKVVGSSRLFVVRMNESSYEKLSKINLPGDVISIAVGDLNDKMR
TMGVDWKKWDELPNANLTLFERTLKFEGETQGAISHVQAYGEKIKTFIDSPNKGFYPLGRTPFKAYFIISLSFRCHQVGVSAYALNYLN
NGPGD
STTKVEFLTKV

PdPV1-2 (Pdi37843_c0_g1)

*MVFATSLLLAATLVA***T**VASKDEYLI*MEINPPKKVSEQEILNMLS*PLEIKHKFRVTGTTKLWIVKLDPGVY**M**KLDN**I**ITVPGKVSVTPAEDMVDTM
QKFGFWPQASLTEENITLFQSHSYLTDVTKEQLTAMMVGY**G**EHMVT~~E~~LKSHPYQFY**R**ATGVTPHKFFFVSSARDEV~~E~~VIGREGVDI**W**
GGPGEYHVKEPEYLIRI

PdPV1-3 (Pdi14773_c0_g1)

*MYALAIALLAFSTFVSN***A**RLQEQYLLDII*EASTQEINTALSDIEIELKF*KIKGTSRHLIVVKQNDLNLEKLA**K**IDIPGKSKPTPLQDMADLMEEIGVGW
PKRELTNVN**V**NLTFLERTLNLEDRTMEQ**Y**MSEKMAYGQLTPLLSSSYRAFKANGAYPPKIYFFINIPRQNLDASNTGIDVL**GGPGNARTS**VQYLT
KLS

PdPV1-4 (Pdi37785_c0_g1)

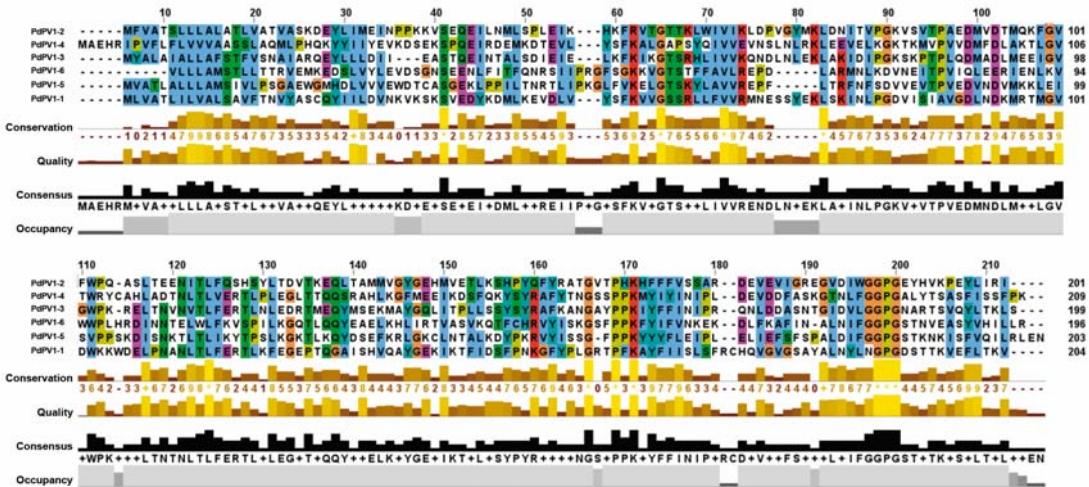
*MAEHRI***P**VFLFLVVA*A*SSL*Q*MLPHQKYYIIYEVKDSEK**S**PQEIRDEM**K**DTEV**L**YSFKALGAPS**Y**QIVVEVNSLNLKLEEVELKGKTKMVPVVD
MFDLAKTLGTVWRYC**A**HLADT**N**LTFLERTLPLEGLTQ**S**RAHLKGFMEEIKDSFQKYSYRAFY**T**NGSSPKMY**I**Y**I**NIPLDEVDDFASKGTNL**G**
GGPGALYTSASFSSFPK

PdPV1-5 (Pdi118877_c0_g1)

*RQLATSSHIANLSSLED***C**SRQR*S*RMVAT*L*ALLAMS*V*LP*S*GA*E*WM*H*DLVV*E*W*D*T*C*AS*G*E*K*L*P*ILT*N*RT*L*IP*K*GL*F*V*K*EL*G*TS*K*Y*L*AVV*R*EP*F*
LTR*FN*S*DF*V*VE*V*TP*V*ED*V*N*D*VM*M*KK*L*E*I***S**V*P*PS*K*DI*N*KT*L*TL*K*Y*I***P**SL*K*G*K*TL*K*Q*D*SE*F*K*R*LG*K*CL*N*TA*L*K*D*Y*P*K*R*V*Y*ISS*G*F*P*PK*Y*YY*F*LE*I*PL*E*LE*I*
FS*P*AL*D*IF*GGPG*ST*K*N*K*IS*F*V*Q*i*L*RE*N**

PdPV1-6 (Pdi33234_c0_g1)

*VLL***LAM**ST*L*LL*T*RV*E*M*K*ED*S*LV*Y*LEV*D*SG*N*SE*E*N*L*IFT*F*Q*N*R*S*II*P*RG*F***S**G*K*V*G***T***S*T*F*FA*V*L*R*EP*D*L*A*RM*N*L*K*D*V*NE*E***I**TP*V*Q*L*ER*E*NI*L*KV*W*PL
*HRD***I**N*N*TEL*W*LF*K*V*S*PI*L*K*G*Q*T*QLQQ*Y*AE*L*K*H*IR*T*V*A*SV*K*Q*T*F*CH*RV*Y*IS*K*GS*F*PP*K*Y*F*IF*V*N*K*E*D*LF*K*A*F*INAL*N*IF*GGPG*ST*N*VE*A*SY*V*HL*R*

B

A) Deducing aminoacid sequences of the six PdPV1 subunits. Putative signal sequences are in italics and underlined. Potential phosphorilation sites are in bold underlined, potential N- and O-glycosylation sites are in bold and on black squares respectively. A conserved sequence is marked in bold red. B) Multiple sequence alignment of PdPV1 subunits.