

S2 File. Amino acid sequences

>**SmPDE1-sv1** - *S. mansoni* SmPDE1, strain CD splice variant 1, translated CDS

MGSCASTGVSQAGSPAKSQLTNGIQQTSFNIQEMNQTEIRNINEEGDAMAGQEKKTDNPR
SNYVLSGIDLLDYGVGLKDIPLRTSDTNMTTDEELDMECALSGVSQFFYKNLTTCTLGQY
AQIPNDTDMRLRSVNTPESLRACYVRMRHIYRMIETDRMGKATLMKNIQYAINVMENAYIA
EKRRIREEEEDLSEAATEYVPDEVRNWLASTFTRTVQSVGIGDQKPRFRSVANAIRAGIF
VERIYRRMSSCSNLIVPPNVLLFLKTGLDTWNFDVFGNEASENHALKVAFELLHKYNL
INKFQINSTALESLLIQLETGYSKSNPYHNLVHAADVMQTCHMIIFMNDLRNWLNDLDI
FAVLFAAVIHDXEHTGTTNNFHIATRSELALIYNDRGVLENHHSAVFRLMQEEEFSILT
GLEADQYKEFRQLVIDMVLCTDMSLHFQQIKNMKTISMPESIDTKALSЛИVHCADISH
PAKEWALHEQWSIDLCEEFFRQGDRERELNLPISPLCDRNTVVVPQSQIGFIDFIVEPSF
QVLGDMIERIVNPTQTEGVLPDTTSPKPKSSDQETVGEQVVPRPWEHFKENKESWSKK
LPPKT

>**SmPDE1-sv2** - *S. mansoni* SmPDE1, strain CD splice variant 2, translated CDS

MGSCASTGVSQAGSPAKSQLTNGIQQTSFNIQEMNQTEIRNINEEGDAMAGQEKKTDNPR
SNYVLSGIDLLDYGVGLKDIPLRTSDTNMTTDEELDMECALSGVSQFFYKNLTTCTLGQY
AQIPNDTDMRLRSVNTPESLRACYVRMRHIYRMIETDRMGKATLMKNIQYAINVMENAYIA
EKRRIREEEEDLSEAATEYVPDEVRNWLASTFTRTVQSVGIGDQKPRFRSVANAIRAGIF
VERIYRRMSSCSNLIVPPNVLLFLKTGLDTWNFDVFGNEASENHALKVAFELLHKYNL
INKFQINSTALESLLIQLETGYSKSNPYHNLVHAADVMQTCHMIIFMNDLRQNWLNLD
FAVLFAAVIHDXEHTGTTNNFHIATRSELALIYNDRGVLENHHSAVFRLMQEEEFSIL
TGLEADQYKEFRQLVIDMVLCTDMSLHFQQIKNMKTISMPESIDTKALSЛИVHCADIS
HPAKEWALHEQWSIDLCEEFFRQGDRERELNLPISPLCDRNTVVVPQSQIGFIDFIVEPS
FQVLGDMIERIVNPTQTEGVLPDTTSPKPKSSDQETVGEQVVPRPWEHFKENKESWSK
KLPPKT

>**SmPDE4A** - *S. mansoni* SmPDE4A, strain CD, translated CDS

MELRTDKVISSNDTISSSQEPQLSPQIPAVVKPRRGSIIVFSALAAEQHGASSLSTDNTGS
MIVRLGRSSTGGATAATSTSSSTNGITAVLPDSSVEGVIVTPFAQVLVSMQRIRNAFIR
LTAAQVSNKYNITTVDSPVTGNLTPDSSDYKIIANETLEELWCLKQLENIQTKRPVSD
MAFSKFKRLLNKELNSFGEADKSRHQISAYICETFLETEKDVTNEEIDSMLERRSSGQ
SHNSTSGQDTNTTSKRQASGTGDQNANPNTTRTPDTSSSVSSVIKTRIGSTGSMSTESR
KSAQLNDSSGLLTTKLPSSSKLTSQNVDGNGPFLPIHGVETPNDNELEERFSLCLDEWG
VDIFEIDRLSNGHALTTVAYRIFQKRDLKTFCIDPHVFVRYLLRVESTYHADVYHNSM
HAADVLOTAHFLQAEALDDVFSDEILAVLFAAAIHVDHPGVTNQFLINTGHELALQY
NDASVLENHLYMAFKILTEKDCDIFANLGGKKRQTLRRMVIELVLATDMSKHMSLLADL
RTMVETKKVSGSGMLNLDNYADRIQILQNMICHADLSNPAPLRLYRKWTGRLIEEFFRQ
GDKERELSLEISPMCDRESVEVEKSQVSFIDFVCHPLWETWCDLVHPCAQLILDLEDNR
DWYECHIKESKMVTQLARPKLATAAEDDEEISTTSGNT

>**SmPDE4B-a1** - *S. mansoni* SmPDE4B, strain CD allele 1, translated CDS

MIMWIICCRKQETKKNKTKDNLQLSSKYSISYNDHRINDNQDNCKLNDLNIHTKLSHDS
YANIENGHYPKQERRSLPDVVIPSTNLPIPRSSLQIDYETGRRSTIYLETTVKLAESESI
NLDDNYSSNIFNETFLNNIKLNMANRDFLLDKPRAHSLLISSTYQKQLTNNHKGRQGRKSD
VSRSNDNHEKKLISKKRLSLFKVKPLKFRKSKDLSLHSLSPKCTIRNDKSNMISTMTCDR
STNSKTKSSLKRIKPSKLFSTNKSSHENIGITKDLNNHESCSERSEDSLQQLPMTRNSMF
KHIQTRTTNLYQTTKNFDLNKQNYLNNIEHSMTNSKNTVLRGSLCIFSQIDEPIVTPFA
QILASLRKVRFNFILLNTVTSTRDSRGAVQPIQSTEDGNSSHLGCSGGQNKITASETL

EELEWCLERLENIQTHRSVSDMASSKFKMLNKELSQFADAGQSGKQISEYICSTFLDSK
ENDPLTTSHSSVISHNNTHGIMNSNSINKDIMINNHDPSEMNTCTPSDSIKNSESTGMY
LFKSVEPGEIIQTTTTTLDNIDGDTTIGVTGDSSSNIPHTINSTVTIGSTTMNKS
LSKLSSSLSTLSKMNSNVNVNENTNNNNNNDDNNINIMMKSSGNHSHTMSIPPSGTSP
LSHQHHSECDKIHCSCQTQIVPYIINSTNPKKLEDLLKTSIDLWGIDIFEVDQLTTNPLTC
IFYNIVQKRNLQKFAIPERNLLLYMTAVEEKYNNNPYHNRVHAADVQSTHVLLNAQSL
ESVFTDLEIFTVLFACAIHDVGHPGVTNQYLINTNDQLAILYNDSSVLENHHLIAAFSLL
GQPGHDVFENFPRKQRLSSRRMIIDMVLATDMSKHMSSLADLKTVMETKKVAGSGILTLE
NYIDRMQILQNMVHCADLSNPAKPLDLYRQWTNRVMEELFQQGDKERELGIEISPICDRN
TATIEKSQVSFIDYIVHPLWETWSDLVYPDAQTIETLEDNREWYYNQINENNNDNNAEN
DE

>SmPDE4B-a2 - S. mansoni SmPDE4B, strain CD allele 2, translated CDS

MIMWIICCRKQETKKNKTKDNLQLSSKYSISYNDHRINDNQDNCKLKNDLNIHTKLSHDS
YANIENGHYPKQERRSLPDVVIPSTNLPIPRSSLQIDYETGRRSTIYLETTVKLAESESI
NLDDNYSSNIFNETFLNNIKLNMANRDFLLDKPRAHSLISSTYQQLTNNHKGRQGRKSD
VSRSDNHEKKLISKRKRLSLFKVKPLKFRKSKDSLHSLSPQKCTIRNDKSNMISTMTCDR
STNSTKSSLKRIKPSKLFSTNKSSHENIGITKDLNNHESCSERSEDLGQLPMTRNSMF
KHIQTRTTNLYQTTKNFDLNQNYLNNIEHSMTNSKNTVLRRGSLCIFSQIDEPIVTPFA
QILASLRKVRFNFILLTNVTSTRDSRGAVQPIQSTEDGNSSSHLCGGQNKITASETL
EELEWCLERLENIQTHRSVSDMASSKFKMLNKELSQFADAGQSGKQISEYICSTFLDSK
ENDPLTTSHSSVISHNNTHGIMNSNSINKDIMINNHDPSEMNTCTPSDSIKNSESTGMY
LFKSVEPGEIIQTTTTTLDNIDGDTTIGVTGDSSSNIPHTCTVTIGSTTMNKSLS
KLSSSLSTLSKMNSNVNVNENTNNNNNNDDNNINIMMKSSGNHSHTMSIPPSGTSP
HQHHSECDKIHCSCQTQIVPYIINSTNPKKLEDLLKTSIDLWGIDIFEVDQLTTNPLTCIF
YNIVQKRNLQKFAIPERNLLLYMTAVEEKYNNNPYHNRVHAADVQSTHVLLNAQSL
VFTDLEIFTVLFACAIHDVGHPGVTNQYLINTNDQLAILYNDSSVLENHHLIAAFSLLGQ
PGHDVFENFPRKQRLSSRRMIIDMVLATDMSKHMSSLADLKTVMETKKVAGSGILTLENY
IDRMQILQNMVHCADLSNPAKPLDLYRQWTNRVMEELFQQGDKERELGIEISPICDRNTA
TIEKSQVSFIDYIVHPLWETWSDLVYPDAQTIETLEDNREWYYNQINENNNDNNAENDE

>SmPDE4C - S. mansoni SmPDE4C, strain CD, translated CDS

MTTISTNIHSKSIGNSLYERRRNWRIHQMKSCMEPPINVSMTSIYNKDDDGIRMNIMSK
KSDILCNKENWWGKTISHEPSVLITPFAQILAILNRARDFLSNYSNSPSYSPHDPMCS
TKSIGCDEKYVNCLHRFDVHYVNQLLNEFDWCLEVDSLQSKRSVSSLTRMKLRSLLSQE
LAASFNQSNGKIIKKDSLKKSTTHNVRFDLTLKNSSLLVHDQDNNNKRSNISQIQKR
KQQFRSCRSQVCEYICKTFLEEDDDDEDVDNNHEDDDGAEDNSKSISSHNPSTEKSIH
LNSPKSKLRFSDKYEERMNESSETTESTTELKSTSSTQFNNDTDVISDTLKLIIILNIEHVD
HSIVENFIINNQSNILAPDLFKLDQISNHHPLSTFGFYLFMKTNVLQKLSIPSVTMLNCLR
QIESRYNSTAPFHNSIHALDVHATYQLFQCNSLKNIFSDLETFAIFFASAIHDIDHPGL
TNQYLINTNHELALLYNDISVLENHHLHVAFKLINTQIECDFKYFTNQQKLLFRKMVIA
LVLSTDMSKHMSSLADLKTVEKQKAFQGNVINLDSYSARMQILECIHAADLSNPTKPL
KIQQEWSRIMEEMFRQGDQEKGQYGIEISPMDRETACIYSTQIGFIDYIVYPLWETMAE
LLHPGLQVLMNDITNNRNWYVKAKEEEEEEVKEENKKNNSIDQ

>SmPDE7var-a1 - S. mansoni SmPDE7var, strain CD allele 1, translated CDS

MRRSRTDQKSGWSHMEVDLTNKNLQRTKNSSCRRIRYRSNSFNAFVCQQSEQMAGTIQL
FYLYEDKNSKNMYNLDKSKERKKSQTVERITDEIKLSFIDRPVGHVKIKNLSNWDFNIFH
LKRTSSNYTIRDIGLQIMNEYDLFQKLKNYFMMARIFNSIEAAYHNFNPYHTALHAADV
LQAVHCFISRSQQLTILSPTEIFASLLAAALHDADHPGVNQSYLEKTGDFLVDLYKSVSV
LEKHHAKFGLCILQENGLSNALELHEWEFVRDCFALKLIPATDITYQGVYQKQFKDLTNYH
MANPSLPFTISDRLLLIMQMALKCSDISNPCRIWPICKEWAIRVCCELFCQGDRERFQWSSL
QPIPTMDRTKFTLARIQNGFIRDMVKPLLTGWHEFLQNNLTLKILQNLDENLKNWLTDLS
LSSSSSTSSSGMTNYVNRHNSLDSQLSTLPLSNNNNNQSISSNQIKPKTIKSEISNQK
SKIELQKFIGSIHLTHSPIQEETMNASESLDSTTNNNNLHSGKLHQTIFITTRVIRR
HSLPETQLAIRKTFNFSLSNKSSTVVLLKNDTQNILSLHSRNNNNLPVGKIKCQSSTFKS
PSSSLSPSSTCTVSANLLQMLYEELKHNNKSNYVLSKIDIKSIPNTNCYKDNKLLEQKVL
DLNYDRTLLRFSALAHRRSSAPITEH

>SmPDE7var-a2 - S. mansoni SmPDE7var, strain CD allele 2, translated CDS

MRRSRTDQKSGWSHMEVDLTNKNLQRTKNSSCRRIRYRSNSFNAFVCQQSEQMAGTIQL
FYLYEDKNSKNMYNLDKSKERKKSQTVERITDEIKLSFIDRPVGHVKIKNLSNWDFNIFH
LKRTSSNYTIRDIGLQIMNEYDLFQKLKNYFMMARIFNSIEAAYHNFNPYHTALHAADV
LQAVHCFISRSQQLTILSPTEIFASLLAAALHDADHPGVNQSYLEKTGDFLVDLYKSVSV
LEKHHAKFGLCILQENGLSNALELHEWEFVRDCFALKLIPATDITYQGVYQKQFKDLTNYH
MANPSLPFTISDRLLLIMQMALKCSDISNPCRIWPICKEWAIRVCCELFCQGDRERFQWSSL
QPIPTMDRTKFTLARIQNGFIRDMVKPLLTGWHEFLQNNLTLKILQNLDENLKNWLTDLS
LSSSSSTSSSGMTNYVNRHNSLDSQLSTLPLSNNNNNQSISSNQIKPKTIKSEISDQK
SKIELQKFIGSIHLTHSPIQEETMNASESLDSTTNNNNLHSGKLHQTIFITTRVIRR
HSLPETQLAIRKTFNFSLSNKSSTVVLLKNDTQNILSLHSRNNNNLPVGKIKCQSSTFKS
PSSSLSPSSTCTVSANLLQMLYEELKHNNKSNYVLSKIDIKSIPNTNCYKDNKLLEQKVL
DLNYDRTLLRFSALAHRRSSAPITEH

>SmPDE8 - S. mansoni SmPDE8, strain CD, translated CDS

MKSETRQPTIKESVDNEITSTDELKANVIDSVTVLHEQGKKFREFISVRKNRNSDTNNIV
SLSALLHSRCPDFSSPMCKVIGILNSARVRSPLPVAKDLQKAINLICSSNVFDQIMKPL
SRTNDPITADLIEGLITGSNLAREPENLLKLRSLAKSLKGSENASTLSTLKN SPEIEAC
LSNFDKWDFNIFDLERITNKKPLTCLGMKILD SFNALS VLRIPSQILVGWLTVIEEHYHV
DNPYHNATHAGDVLQASAYFLQHSLIRSI CTNIDEVATLLAAIVHDVDHPGKTNPFLVNS
NDPLAILYNDIAVLESHHA AVSFELTLRSPDINIFQNLTREEYRTMRSYIVDMVLATEMV
RHF DIVTKFVN TLSKPM LAKNRH HDRS SVGSMSSM ECSMGMTISHSTS PPGQERI SST
LENLSTAENRTL I KRLII KCS DVNN PTRPLS ICKE WATRIAEE YFC QTEE EKRRN LPIVM
PNFDRQTCNISQSQLSFIDFFLKGMFSGFDCVFPipeLMNNLENNTTYWASNIDREKKQH
GTCPVELKPTTIHQE

>SmPDE9A - S. mansoni SmPDE9A, strain CD, translated CDS

MGSVISKLTPKVIYILLINGNIERILITLSCTSFEIHDLICILSNVPKSSNIIITDVNGLH
IPCGSMLANTYNTPYT VTIQ PSEPSE I SLIVRM FESIIKQINDTMKISDLKNEFTERI
QLEQRVMVESDRYNDIDVIKKE LKQLKIQIHERKTGLTNIGSERTYLGNI RLSNDGVKI
LELQNLPIFEKYTLTQSTIDFLKKPTFDIWHWEPNEMI ALLEHMYNELGVVSEFNINPLT
LKRWLLSIQANYRNPNFHNFRHCF CVAQMMY GILYLCGLNNDFSREELGILLTA AVCHDL
DHPGYSNSYQINARTELAI RYNDISPLE NHCAVAFSILNHPELNIFANVNQEVFRRIRQ
GMTSLI LSTD MARHGEILETMRRHLEEGFSMNKEHRET FKMVL IKCCDI SNEVRPLS VS
EPWVDCLLEYYFNQSDREKLEG LPVAPFMDREKVTKPTAQIGFIKFVLIPMFQTVASVYP
IIDELMVTQLKSALERYEKMLAEEEETKRN LQLNEAD

>**SmPDE9B-a1** - *S. mansoni* SmPDE9B, strain CD allele 1, translated CDS

MNATKCEEDITS DHKISNITISQNNTNDNTRTICKPAIQT KTTTLPRKLNADNDDNNNT
NSFLSLYTRCIKPNRKKQLDNNNNNNNSNHHQSHFCLNCRNCSSNTPSSSSSSSS
SSSTATTEAGASAVAATTGRKESNSFSLPFPLDNKSHDSLISYSSKITNNNTNFTNDI
PGTKVTLTPNHTNNIIMSVSNCSNQFNSISVDPDKDNHKIDAQNTSVHINKRQTADKF
SNTTEYQSKSNMTTVMTSIPTTTIEPINVKKINPSLMIADNSAYFNDNHENLLEISK
LPIYDSTKLCIKCQKNIQLVSKDYEHILLTNNQGKHEKITVNNNSIINNNNGNGYMEH
TTEMIDDIKKIKEMESDIEEYVKHVQHIFDHINLTQFCQTDKSNSYIIDNKQLWDA
FNTSYANQEKFIRPSHNDINIYHLDMMNGDVNDNDEEIIIEAHYDNVHSYRKCNHFSV
DKMDKKRISKIYRQLHNLRCQVESFSYLSWLGLTAEQPPTQKVLPFGNAPAPNPQMHLI
RRSDADSRRNIQEFKLLCKEPVSKE DLI ELSSTFNNWSRTDAQLIRLVREM FQELGFIE
HYNIQLHQLDWLTDIYRRYNRVPFHNYKHA FMVTQMCYVLIWGGNLTNLLDIDDQLILI
VSAICHDLDHPGFNNAYQINAGTVLAMRYNDQSPLENHHTAVAFDLSHKEVDPFSLST
TTRQRIRKGVIRCILATDMSRHNEILDEFNRQVLTDLNAAWEIDPNTKKPTWMNKTQKD
LVMVIILKISDISNEARPLNVAGPWINRLAEEFFHQSDYEKLVGLPVAPFMDRHKVTKS
SQCGFIRFVILPLFESLAKLLPEVKPIIVQPALEQLAYTDLHNNEEKKTNTENQKSNTN
EHQNGNNNNHNEKEHSK

>**SmPDE9B-a2** - *S. mansoni* SmPDE9B, strain CD allele 2, translated CDS

MNATKCEEDITS DHKISNITISQNNTNDNTRTICKPAIQT KTTTLPRKLNADNDDNNNT
NSFLSLYTRCIKPNRKKQLDNNNNNTNSNHHQSHFCLNCRNCSSNTPSSSSSSSSSS
STATTEAGASAVAATTGRKESNSFSLPFPLDNKSHDSLISYSSKITNNNTNFTNDI
TKVTLTPNHTNNIIMSVSNCSNQFNSISVDPDKDNHKIDAQNTSVHINKRQTADKF
SNTTEYQSKSNMTTVMTSIPTTTIEPINVKKINPSLMIADNSAYFNDNHENLLEISKLP
IYDSTKLCIKCQKNIQLVSKDYEHILLTNNQGKHEKITVNNNSIINNNNGNGYMEHTT
EMIDDIKKIKEMESDIEEYVKHVQHIFDHINLTQFCQTDKSNSYIIDNKQLWDAFN
TSYANQEKFIRPSHNDINIYHLDMMNGDVNDNDEEIIIEAHYDNVHSYRKCNHFSV
DKMDKKRISKIYRQLHNLRCQVESFSYLSWLGLTAEQPPTQKVLPFGNAPAPNPQMHLI
IRRSDADSRRNIQEFKLLCKEPVSKE DLI ELSSTFNNWSRTDAQLIRLVREM FQELGFIEHY
NIQLHQLDWLTDIYRRYNRVPFHNYKHA FMVTQMCYVLIWGGNLTNLLDIDDQLILI
VSAICHDLDHPGFNNAYQINAGTVLAMRYNDQSPLENHHTAVAFDLSHKEVDPFSLST
TTRQRIRKGVIRCILATDMSRHNEILDEFNRQVLTDLNAAWEIDPNTKKPTWMNKTQKD
LVMVIILKISDISNEARPLNVAGPWINRLAEEFFHQSDYEKLVGLPVAPFMDRHKVTKS
ASQCGFIRFVILPLFESLAKLLPEVKPIIVQPALEQLAYTDLHNNEEKKTNTENQKSNTNEH
QNGNNNNHNEKEHSK

>**SmPDE9C** - *S. mansoni* SmPDE9C, strain CD, translated CDS

MMFKRLIRCHVKSSRTPPNKGDTNNKIHLPKCTTWLFSTI SSSSKISTTS DIEASKSTE
TCLVDNSSKTNNCNETCNLINTQHPNDSQRISCPYCDPEGIKLPIHFTKVRNQFLAI
RSQSISSSIKEQLKSHSFNNWLYSDAELINFVKFMFDLNLPELCHFSIDTLENWIFSTY
SRYNNVPFHNFKA FMVTQMMYCIIKMVNLPLYLSSVDLLILLFSALSHDLDHPGFTNSY
QINSGTWLALRYNDISPLENHCMATFDLITNNPTANIISGLTPNESRHRRSVIRCILS
TDMAIHSECLS QFQVLRKQVYLNQCSLSIDMSSSISSIKHNHQNIHDSCC NNNQQKKL
KNPDSIFPSLQLSSSYIGYSSPSPTQQPTLTTSHDHYHRHQVNHNNDDETGVDRQNRSE
KYEQYNSCINQHVN>NNNNVVNFGGDNDSDHNGDDINNNDYGHINSLSI QSSLISLINQE
PEYLLRLLMILLKVC DISNEIRSPLVADA WVDCLFNEFFLQAAAEKQAGLPVAPHMDPDL
VVKSNSQLNFLHSILIPLVKELTYIFRELHVLLES AHRSEHFFQIKQYELAQQVVDSNC
CSTTVTTSTSSTLPITTITSTSVCHVNKSNRVSL LLLFN

>SmPDE11-a1 - S. mansoni SmPDE11, strain CD allele 1, translated CDS

MSSLVRMCELCGGHIGEQSELSFEDMVTNWL DENPEFTFKYFVK SASPSMVEAWANGRNH
GEYDCLFDNSITVMDEHNDKNDDKTPVTTSLSPIRKISSQDLELTYDKRILSSNEDGKP
TFINSVFFFPSNEHIDSNTSSVRQTVASPSRPTH LTERDLISELALDICRELDVTSLSF
KIVQNVCR LINADRGSSFLVEKSRSTGEDVLVSKLF DITPECIFDDVLQRCSSNH II VPF
NVGVTGYVARTGDYANIPDAYADPRFDDSVDRV TGYKTRCLLCMPIK NVDGKV LGVALVI
NKKVPSDQHHDQSINSVQPSSCESESISKHASFTEEDVKIF QSYVTF CGIGLHN AQIYEQ
SRLEYRNQVLLELARIIFSEQLDITRLIYSVLSHTICLLQCQRCQ LLLVKT TSSMSSYS
SIDEMGPFHDFHSQIFELAWNEKSDSPDVKKKHSIDEARFPVQLD LAIHV LQTGESLHV
NINGTTISNNNNKNNNNNEYKKIDETLEEDLDPVWRSRSVLCMPIK HSDGKV LAVCII
TNKSTV DLRINNNNFSQQVTRHFDFKPVTDNVQCSSNDNLSSKEPVMTSINDWSGIFT
YSDEF LFEEAFALFVG GLG ISNSQLYEKAIRSAAKQKVIMDVLSYHATAPTSEAKRLAT SLI
PTMRFYHLDKFSFTDVR LSDEDTLKACIRM FQEMNF MKSIHFDQ LSFARWLL SVRK NYRE
VTYHNWRHAFNVTQTMFCILLKGDFQS VFTDLECL ALLTACLSHDIDHRGTDNQFQIKTM
SPLAKLYSTS VLEHHHFNQFMMILSIKGNNFLCNLRSEYDTVVKLIREA ILATDLSRYF
ARLPKFQQT LHHLKEINDQSTNLWRNDREQRLLL GCMFMTACDVS AITKPWPVQKLTAEM
VANEFFE QGDLEKERLNVT PAALMDRERSNELPKLQV SFIDSICVPI YEAIVQVSPN FEP
LLKGCKRNRT CWL LSEN GEVDH SLYGLNDESETI PGTSTETTAKSITTTAEGSTQLEN
VITSTSNIITS LGTLNPDSAERIAKSKPFTSSNIR RASVSSMTVGGQEPP IQCQSSVES
K

>SmPDE11-a2 - S. mansoni SmPDE11, strain CD allele 2, translated CDS

MSSLVGMC ELCGGHIGEQSELSFEDMITNWLDENPEFTFKYFVK SASPSMVEAWANGRNH
GEYDCLFDNSITVMDEHNDKNDDKTPVTTSLSPIRKISSQDLELTYDKRILSSNEDGKP
TFINSVFFFPSNEHIDSNTSSVRQTVASPSRPTH LTERDLISELALDICRELDVTSLSF
KIVQNVCR LINADRGSSFLVEKSRSTGEDVLVSKLF DITPECIFDDVLQRCSSNH II VPF
NVGVTGYVARTGDYANIPDAYADPRFDDSVDRV TGYKTRCLLCMPIK NVDGKV LGVALVI
NKKVPSDQHHDQSINSVQPSSCESESISKHASFTEEDVKIF QSYVTF CGIGLHN AQIYEQ
SRLEYRNQVLLELARIIFSEQLDITRLIYSVLSHTICLLQCQRCQ LLLVKT TSSMSSYS
SIDEMGPFHDFHSQIFELAWNEKSDSPDVKKKHSIDEARFPVQLD LAIHV LQTGESLHV
NINGTTISNNYNKNNNNNEYKKIDETLEEDLDPVWRSRSVLCMPIK HSDGKV LAVCII
TNKSTV DLRINNNNFSQQVTRHFDFKPVTDNVQCSSNDNLSSKEPVMTSINDWSGIFT
YSDEF LFEEAFALFVG GLG ISNSQLYEKAIRSAAKQKVIMDVLSYHATAPTSEAKRLAT SLI
PTMRFYHLDKFSFTDVR LSDEDTLKACIRM FQEMNF MKSIHFDQ LSFARWLL SVRK NYRE
VTYHNWRHAFNVTQTMFCILLKGDFQS VFTDLECL ALLTACLSHDIDHRGTDNQFQIKTM
SPLAKLYSTS VLEHHHFNQFMMILSIKGNNFLCNLRSEYDTVVKLIREA ILATDLSRYF
ARLPKFQQT LHHLKEINDQSTNLWRNDREQRLLL GCMFMTACDVS AITKPWPVQKLTAEM
VANEFFE QGDLEKERLNVT PAALMDRERSNELPKLQV SFIDSICVPI YEAIVQVSPN FEP
LLKGCKRNRT CWL LSEN GEVDH SLYGLNDESETI PGTSTETTAKSITTTAEGSTQLEN
VITSTSNIITS LGTLNPDSAERIAKSKPFTSSNIR RASVSSMTVGGQEPP IQCQSSVES
K