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AdorGV -----MEDAPYKMAIADKRFNPIHEELAKRYSLQNFINNISNANQRISHDDIMVLEKTRGQSDNVLWQLLRVNRSTAS-GSAVSEYDIDSPAIRYIGK
ChocGV -----MAYELAV---SENVLNNQELLYAEKYCLQKYVRRLT-LTHRNTKKEEIMALEHATRGQTNNMLWKILLRINRRTTASGGNT---FFEGSTPAMRYGI
CrleGV -----MAYELAV---AEGNMTDLQLEFAKKFSLQNYVTRTLT-LEHRNSKKEEILKLEESTRGQSDNLLWKLRLVRNDRDTASGSS---YCGNPNPAMQYGI
CpGV -----MAYELAV---MEDVMSDVQLELARKYSMQLNYVTRTLT-LEHKNSREEILQLEEATRGQSDNLLWKLRLINRDTASGSS---YCGGENVAMEYGL
EpapGV -----MHEFNES-----LTAEQNRLDADKYCLQNYVSNLT-LDYRNSKQEIFELEKATRGQGENELWKLRLINRRTTAS---NSGHAFYGGENEAMRYGL
PhopGV -----MSYEF---FQDCMTPQIIMLAKKYCLQNYVRSLSKVDHRNTPEEIKQLEIATRQADNLLWKLRLVRNRTTASKSTG---CFVEDSPAIOFGK
PiraGV -----MAYELAV---SEGGMSDEQLGFAKKYMLQNYIKTLT-ESHRTTTEEIMELEKATRGQAKNVLWKLRLINRRTTASGSGG---FYGETTPAMKYGI
AgseGV -----MDLSNCG-----FTDEQLKMAQKYCMENYVTKL-PGHKNTKEEIFELE-ATRGCCKNNLWKLRLVRNRTTAT-KSTGSSFYGES-VAMKYGI
HearGV -----MEQTRHTERVITMRFQNYPTYKYKRVSRDSSVFLGTAYAMDDSSNNAQ---SNLAMNEYEQQLCDKYSYSNYVARLQ-PGHVNTREEIFALERATRQSSNNALWGLVRLNRKTASNRRGCSFVSDKNEAIRYGN
PlxyGV -----MADK-----LTGYCGLSDKYCLENYASRLT-AAHRNTKQEIFELEKATRGQSKNNLWKLRLINRKTAS-KST--YFSGDT-EAMRYGI
PsunGV MRTESAVATTYCRNMDRTRLTERVITVRFQNYPTSNTIAFFTINRLFHFEPAYTMDNNSSSDPQLKKLAMNEYELQCDRYSYSNYVARLK-PGHINTRKEIFELERATRQONQNALWGLVRLNRKTASNLSGCSNFVSDNNEAIRYGI
SpliGV -----MEEKSNSEF-----FTPEQYRLVLKYRYDLYITNLK-RGHYNTREEIFELEKATRGQSSNNLWRLRLINRRTTAS-QSTCSAFNFET-EAIMYGN
XcGV -----MEQTRHTERVITMRFQNYPTYKYKRVSDNNSVFLGPAYAMDDSSNPNQ---SKLAMNEYEQQLCDKYSYSNYVARLQ-PGHVNTREEIFALERATRQSSNNALWGLVRLNRKTASNRRGCSNFVSDKNEAIRYGN

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AdorGV IKEKALKNDNIIISTIKDGIETYTNKRVTTETVLDGCMFLSSIGFYSASPDAYFKLEDGSMVMEIKCPYSYKDDTIKDIRNRFNTNRARYRIPNTAFSINRHGEDIFVCVEAQNNHYRQMLQMYATGALLAVYVVKFRDMPEVHFVKRD
ChocGV CNETILKNNKAIINTITERIEKKLGGKVVENVLDCGLFITDIGLYSASPDGYFKLETGELVVLEIKCPYTYRNTKLEQIRREKNNTRGAYRVEHTALLVNRNGP-LHVTVTERNEHYRQMSQIYVTNAIMAVYVMKFSMDPEIHFVEKN
CrleGV KQEKILKEDKLIIDTVKDRIEKKLKKKIEEVLDGGLFSLTIGLCSASPDAYFILENGELVVLEIKCPYNYRNSFKSVIQQLGSKRK---RIAHTALKRVSHDP-LIHIEQRNNHYRQIQSQLYVTGAVMAVYLVKFSKDCDHLVVERN
CpGV RNEKLLKDNIVMGIIVERVEEKLNNKVAQVLECGFLSDIGLYSASPDAYFVLDGSELVVLEIKCPYTYRNDTFQSVLQQLDGRSS--RVARTALKRVSKQP-LILKVEQRNLHYRQMSQLYVTGAVMAVYVMKFSMDPDHIFVERN
EpapGV DNEKLLKQNAQLIDLVCARIEHKTQKQVVERVLDGCMFITELGLYSASPDAYFLLENNAMVMEIKCPYTYRSETLFTIRDKFNN-RNRYRVPHTAFSVNRHGEYLVNLVLEKNNNDHYRQMQAQMYVTNAVAVYVMKIGQDHMHFVERD
PhopGV NGERDLKQNTTELIDLVCQKIEQKTGKIVLEKVLCEGLFSLPIGLYSASPDAYFVLDGGLVLEIKCPYTYREDTLESVRRHMNSTRTYRYVAHTAFSVSRNGA-MNVVREKQNDHYRQIQSQLYSTNAVLAVYVMKVFVDFPEIHFVERD
PiraGV DNEKLLKKNKIVMSIREGVEKLLKKEIEEVLDGGLFSLSEIGLYSASPDAYFRLDNDLVVLEIKCPYTYRNETLESIRLKMNSRSRYRVPHTAFSVNRHDT-LHVAVEKRNNDHYRQMQAQLYVTGAVMAVYVMKFSMDPEIHFVPRD
AgseGV EQEEWIKQKQHIMDAVCEGIEGKLLKVKERVNLNCGFLSPLGIYSASPDAYFVLENEELVVLEIKCPYTYKSDSMETIRRGFNN-RSRYRIPHTAFSINKNGP-IDVRVEKKNNDHYRQMQAQLYITGAVLAVYLVKIGDVPPEIHFVERD
HearGV EQETVVKKNQLLMRTIIEKIEEKLSCDITETVLDGCMFISPIGLYSASPDAYFVNEQGQIIVLEIKCPYTYKDTNLESIRRLNKNKARYRIKHTAFTINKQGP-IEVRVEKKNNDHYRQIQSQMYVTGAVLVYLVKIGDTEEVHFVERD
PlxyGV EHEDLKKNCIVMDVLCAEIENKLNASVREVRVLECGFLFTELGLFSASPDGYFVLDGRLVMEIKCPYTYKDSLEQIISGFNN-RSRYRIPHTAFSVNKTGP-VDIRVEKLNNDHYRQMQWQMYVTGAIMAVYLVKIGDTPHVFVDRD
PsunGV NQEKVVKNQQLLMRAIEKIEEKLDCVVTQTVLDGCMFISPIGLFSASPDAYFVDEKQIIVVLEIKCPYTYRNTLCSIRNSFNRRARYRIPHTAFSINKQGP-IDVRVEKKNNDHYRQIQSQMYVTGAVLVYLVKIGDTEEVHFVERD
SpliGV RNENVVKNQNELLMRHIGEEIEHCLGKSIKEYVANCMMFISKMGHSASPDAYMLDDNIVVVEIKCPYTYREKTLTISRNSFNTRKSYRITNTAFSINRSGP-PFVKVEKNTHYRQMQAQMYVTGAVMAVYIVLIGQTPPEVHFVERN
XcGV EQETVVKKNQLLMRTIIEKIEEKLSCKITETVLDGCMFISPIGLYSASPDAYFVNEQGQIIVLEIKCPYTYKDTNLESIRRLNKNKARYRIKHTAFTINKQGP-IEVRVEKKNNDHYRQIQSQMYVSGAVLVYLVKIGDTEEVHFVERD

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AdorGV SKFIQRVYNQEMNKLNRVVQSYKLSQ-SNMNTLAARMITYNRTNEFDTNSARLLAEAGMYS CDGNSVRCYICKSTYETADRSVESILSEHDN-LCN---VPKT--QAMHNSYLNIVDRINNLHQTN-LFLYEECQRLAQEGFVLIN--STT
ChocGV EQYSKEMRHKELAKLQMYVVENKRSQ-IMIMESERLKTFTNT-NFKTGLAAALACDGMYYWCG-NVVCYFCQQQFEIVDKLLEEILEEHT--ECNKEGNSIMGFKVTHPRYLNRFRINSRKRKTK--ENVVRIEELADKGGFFYD---GSK
CrleGV ESYIKELADKERFLNMIKENNRNK-KFTLEVHRLDSFKNS-GYDEEIVKQLAKNGLYCWCW-NVICFFCQGHFEINEKTIQQLINEHDNENCCKGDCNSM-TNVYKRYLNI FDRINNLNESQ-TLSLSEIRDLAKKGYND---GNK
CpGV EAYIKGLADRERMKLEMYVKENKRNK-VMSIERERVNSFRGS-GYAREMVERLAREGLYCWCW-NVICYFCGQQFEVDNKSIEEVLGEHKVEQCDRTNNVSA-VRVHDNRVYLVNVDRIINNLHTVVTLLSSVERRQLAKKGYND---GNR
EpapGV NEHINKMKKELAEFKNYTNQNSYR-CMIKEQSRYSFDS--AVEEQMRKLAAGLYNKHG-VITCYFCKSQFEINN-AIN----HD---CGTRQDNVYIYNVDNISYINERDRIDNLLNSAN-YCREQATALAKSKFYW---DGTQ
PhopGV EKYIRDLAERERIRLKIYVDENKRS-VMVSEKERLKSFEQY-GYNEHLIKSLARDGLYCWCW-NVMCYFCQQQFEI IDKNADQILAEHN-LECTKLENIAI-STAAHPEYLVNVDHMRHNLSESQ-LFNSVDCEKLAKEGFFIDQ--NNK
PiraGV EKFIKELADRELKIKMYANENKRSQ-IMVMEKERLKSFGGS-GHADK IARLLAKNGMYCWCW-NVICFFCQGHFEI IDKSIDILEEHN-KECNRQENISM-VEVGHERYLVNVDRIINNLNTQ-KYSLIECEEELAKKGYFYN---GSR
AgseGV IKQIQELKDREREFNHVRDNRNRYLVLENRKKTFFPONGAYSEKSKLLARQGFYYNQ-CVVCYFCKSKYETST-PFLEMT--HS--NCD-KTDNISHDV IKFFNYINQKDRVNNLNKYCS-YDYQQCIELANQGGFFYD-PSDNT
HearGV EEMINDYANNEKSDLKEILSENAKHM-EFVMERNRFLSFYSLPNVKNNENIKKLARDGFYYWNG-CVKCHFCQKHVELEN-DVDNILAQHV---CNSKHGNVRYADIKHRKYLTLQSRINSFIPLNI-DTT-LALELAKLVFVA--DDNN
PlxyGV EKLTKEIGERELNEFNRIVSDNKKK-YLLMEVNRKLTFFDS---ASTDSKLLAKNGFYQWYG-QIICYFCNLKYELDM-GVAAILDNHK--LCD-KTNNVKLISIAHPSYIKLQKRIDSITSTG-----DRVELAQRGFFE---QNGV
PsunGV EEMIKDFAKNEDSELKRVLSENAKHR-EFVMERNRFLSFYNSPNIKNDIVKKLARDGFYYWNG-CIKCHFCQKHVELEN-GLDNILAQHV---CNSKHGNVRYADIKHRNYLTLQSRINSFSRLNI-DST-LAQELAKLVFVVG--DDNN
SpliGV ASVIQELEAKEKKDYNTYIINNERCR-MYVMEKNNRESFKDCLESK-AAILKLSRSGFYYHFG-KIICYFCRVQVELER-GVDNALLQHAP-DCN-KEGDLRHAIFKYPRYFSDKIREQSLDRHVS-D----KQTAAKNNLFC---DGSK
XcGV EEMINDYANNEKRDLEILSENAKHM-EFVMERNRFLSFYSLPNVKNNENIKKLARDGFYYWNG-CVKCHFCQKHVELEN-DVDNILAQHV---CNSKHGNVRYADIKHRNYLTLQSRINSFIPLNI-DTT-LALELAKLVFVA--DDNH

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AdorGV PELYCCGG-----KDGHHQTCYKTKQERKRIIESGS-----
ChocGV LVLYCCGGGKLLGKERHTDQCKKKEN-----
CrleGV FVLYCCGG-----EKLHSNECHK-----
CpGV LVLYCCGG-----ETTHKPECHKGQQ-----
EpapGV LRLYCCGQT-----DLHAPNCS-----
PhopGV LVLYCCGN-----EQDHDNACTKATQ-----
PiraGV LAFYCCGE-----QETHKNDYKIQ-----
AgseGV LKLFCCGEI-----DKHSQRCKDNGGETS-----
HearGV LKYCCATTIS-----DDKINQEC-IKATVINCPHVSVDTRY-----
PlxyGV LSLFCCGG-----AVHNQDCRYEEM-----
PsunGV LKYCCSTVIS-----DDKIDQQC- IKDVVKNAHSDDC-----
SpliGV IALYCCGNVIK-----SDLAESPFIDKLLDNIVHTIDCERF-----
XcGV LKYCCATTIS-----DDKINQEC-IKATVINSPHVSVDTRY-----

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Multiple alignment of Betabaculovirus Alkaline Exonuclease. Multiple alignment were carried out with ClustalX v.1.64 using default parameters. Columns shaded in light blue correspond to identities and columns shaded in light orange correspond to conservative changes.