

(a)

Exon 1

At 1:MADVSRSSSLYTEEDPQLQAYSG.LS.FPR.LKSLSNPL...PSPYQS.....EDLQQTHTLLQSM:56
Mt 1:.....MEKHESSEVDEETANYSG.LS.FRS.FS.LQPSS...NPFHDL.....DAINNN...LRSM:47
Os 1:.....MASADFLAASSPAHLPRLGPAAPPGTAAASPSAAR.....GALLDGI...SRPL:48
Zm 1:.....MDAAFLCAISSSTARLPRLGPAIGP.....SPSNPR.....DALLEAIARSL:46
St 1:.....MVNEALISDPVFLHSLAG.LS.LPT.VRVSTAS...VSNPKD.....LELIHNF...MKSM:52
Bv 1:MGVRTETEGSDLVFLADYSS.LS.FPR.FSSLTSS...SSSIDLRKPNSPILNSILTH...LKAK:60

Exon 2

At 57:PFIEQSEHQEQAKAILED.....VDVDVQLN..PIPNK...RERPRGLDRKKKS...FSLHL.TTS:108
Mt 48:DLGSPTRLAEQGGQSIENNLGFNTENLTQDVENDDVFA..VEEGEEFPKRKRRLGLNRRARPRFSLKP.TKK:116
Os 49:..KGSKELVQEQARMAMKAVDGDIG...KLYGGDGAGVAAAAADGKNQGLRRPAPDRKKRFR...LKTTP.PAN:111
Zm 47:..KGSEELVQKATMVPKEHGDIG...ALYHDDGV.KGWPPANGSKBQGGRRPALDRKKR...FAMKD.TGS:108
St 53:ETKGGP.LLEAREIVDNGAELLNTKFTSFILSKGIDGLAMKGEKQLQRRRGLGRKKR...FSLKPPST:121
Bv 61:..LSSPDKMLKQAKPILEDLSNF.....LKTDKTEA..IAENKVPRERRPALGLKRAK...FSAKP.MPS:118

Exon 3

At 109:QPP..VAPSFDPSPKYPRSEDFLAAYDKFE:136
Mt 117:..SVEDLLPSLDIKDHKDPPEFLAHERRR:145
Os 112:KQVQN.VDYT.ELLNIEDPDEYLTLEKLE:139
Zm 109:KQVPV.VDQS.KLSNISDPITFTMTLDRL:136
St 122:QTVS.VAPRLDIDQLSDPVEFLSVAEKLE:150
Bv 119:QDAS.LEFSIDVDKLSDPPEELSAFERM:147

Exon 4

At 137:LNRRWQKQTESSEVIDIQEPPS..RRPRRGIPG.....:169
Mt 146:NRRLQKQLG..IVSSEPQDSTKPRDRRGGLPGFNRG.....:182
Os 140:RDKIKRLR-EVPTTEGTYNRGIEPPKLR.GLLR.....:174
Zm 137:RDEIKRLNGEAER.TLFDVPDEPIRGGLRG.....:170
St 151:DEKEIERQKSSIHDPDVNPPANARRRRGILG.....:185
Bv 148:NKKVQRLRCEPLFDLQNASLARRRRSLGkffallfa*:192
[Intron 4?]

Exon 5

At 170:..RKRRPFKESFTDSYFTDVINLEASEKEIP....IASEQSLESATAAH.VTTVDRE....VD...:221
Mt 183:..PVK.YRHRFQOETLDNNVDVLSQCFVFESDNLVLVDGNT..DTGDAS.PTSLDNE....VA...:235
Os 175:RKSVHSYKFSASSDAPDAIEAPASQETETVTSQTTQDDVHGAHEMTTEPVSSRSSQDAIPDISARE:241
Zm 171:RKSVRSFVIEDVGTQDNEAPASQATMTGSOQLSDVMHAGVAGNRS.VSSRSSE....AISEKE:232
St 186:..KSVK.YKHRFSSTQPDNDFAISSQETLEDDILVEHGSQLEPEELHGLN.VELQEA....LT...:241
Bv 193:RSSYTHRPYSSKSMADVDETLFSPQETIYDEILSPIRDDVLPANVVN..HSPSVI....LS...:249

Exon 6 (beginning)

At 222:DSVTDTDKDLNNVLKDLACSRREEGDAIKLEERQK:262
Mt 236:GPAVEENKGNIDILQGLTCNSEEBCDGAMNLQERQK:276
Os 242:DSFV..WKDNSFTLNYLS.AFKDDEDEENLRLTKQK:279
Zm 232:VSLA..EKDGRDDLTYIT.SIQDDESEEEEFIRKTGK:270
St 242:GSVKKTENRINKILDELSGSDEDDRDMAVSKLQERQK:282
Bv 250:DSKRRTSKVS.EFDELSSNYEGDEDEVENLLRDKQK:289

(b)

Carboxyl terminus

At SCQKSLAAGTKIEGVRSRTRIKSRPLEYKGERFLYGRIHESLTTVIKRYASGEGKDRSRASKVSVFVDEYKKLVDFALH
Mt QHMSLADAGTSWESGVRSRTRIKSRPLEYKGERFLYGRVHESLSTVIVKRFSEGGD..GKPNMKVKS FVSDKYKQLFEIASLY
Os NRKSLADAGTLQQAVERSTRIRSPQHMLGERFLYGRIHGTMTATVIVKRFSESGD..GKGLFLRVKS FVPEQYFSDLAEASAKY
Zm NQKILGDADLACQVRSRTRIRSRPLEYKGERFLYGRVHESLSTVIVKRFSEGGD..GKRSLLVKS FVPEQYFSDLVAESARY
SlE SSSPSLADAGTSWESGVRSRTRIKSRPLEYKGERFLYGRVDEGLKLVGLRYISF....GKGSFVKVSYIPDDYKDLVDLAARY
Bv QRRTSLYAGTGWAEGRSTRIRSRPLEYKGERFLYGRVHESLSTVIVKRYASGSKDTEAG.VKVKSFVSDKYKDMVEFASLH
Pbt SKQHSLAASGTSWETELSTRIRSRPLEYKGERFLYGRIHESLTTVIKRYESGNDK.GKRALVKVSYVDEYKDLVELAALH

CENPC motif

Identities Consensus (>60%) Similarities