

S1
S2
S3 MADTESRAVTMEEQEQTIDDAKNPCQQDSAYGSLESSSQGPSQKSSYSGSKSLNSGSSHSSGFGDNADFSENCLK
S4

S1
S2
S3 DTKHKDHKRKKVKEKTEKKVEKAEKLTKEEKKEKDKTRSGQNHHDPRLTSETASSIATGMEESSSAFNCNSNDGD
S4

S1
S2
S3 ERTDQPNLVYTQALNYIRKIKERSAEQGLPFASPELEQLP
S4
RDTHDVA AFLKSPKSTRGFTVAISVQDGLVLQVSP
RDTHDVA AFLKSPKSTRGFTVAISVQDGLVLQVSP

S1
S2 AITDVLGFPKDMLVGQSFIDFVYPKDSINLSSKIIHGLNMPLRNESTIKDNYGTSFFCRMRYHSLRTSGFGVRNK
S3 AITDVLGFPKDMLVGQSFIDFVYPKDSINLSSKIIHGLNQPFNEC IKDNYGTSFFCRMRYHSLRSSGFGVRNK
S4

S1
S2 R.....
S3 RTIYKPCMKILKFHDPTCLDETASTCGPNSSLLLAEVIPIQSIYQVPEETPAMGSFSIRHTASCNFSEYDPEAIP
S4

S1
S2
S3 YLGHL PQDLTG NSVFDCYHPEDLPLLKEAYELMVREQGNPHRSKPYRFRTFNGSYVTLETEWLCFVNPWTKRIDS
S4 NSVFDCYHPEDLPLLKEAYEEMVREQGNPHRSKPYRFRTFNGSYVTLETEWLCFVNPWTKRIDS

S1
S2
S3 IIGQHRVLKGP KDIAIFLDPGDKAPTLPPEEVMKEAQAQKDILELLAKPVVAYKDPSKGSQEMRRRTLANMMSS
S4 IIGQHRVLKGPSDIAIFLDPGDKAPTLPPEEVMKEAQAQKDILELLAKPVVAYKDPSKGSQEM.....

S1
S2
S3 IVDEL DNLEKTETQVANKYSLPTLNKIRKPNHHPPVRPDHNSPVQKGQESVTSSSESPSSYGHLYSETIHRFFR
S4

S1
S2
S3 SQPKTVSSDESGDSKMEVSHLGSVGSTTNKQSQDNSQSQSGSGSDNCDRTRKSVSTANGSGTGSGATGRTSSQG
S4

S1
S2
S3 RSYKHVQLTEEVLSRHNADMQKMFMRQRRTGPKPHKDKGKLKTMKKLIKRPVERTCGVKRCGGAVEHEATASKQP
S4

S1
S2
S3 FLAPSAAGSGSSLKPPSVDVWGQGESQTHIQSSGSAGATIGPTHVAAPQYPSIVPGFYFPTSTSSISQVAPVSRA
S4

S1
S2
S3 PAPVPLVLPPQPPTFLHPQGVSAMPVQYIPGVMYQPVGPPLFNAPPLMLPNVVYQHTAVHAPLSHVVPVPDPTQK
S4



Figure 1: Corystes sp PER

S1 - TRINITY DN17321 c0 g1 i1.p1 ORFtype 5prime partial len 218
 S2 - TRINITY DN71430 c0 g1 i1.p1 ORFtype internal len 111
 S3 - TRINITY DN3394 c0 g1 i4.p1 ORFtype complete len 1216
 S4 - TRINITY DN3394 c0 g2 i1.p1 ORFtype internal len 128