

S1 MEK...THRTVHWFRKGLRLHDNEALYHAVTTSQVVFPIYILDVAWQTEKEKFSALKTRFLIECLRDLDGGLKKC  
 S2 MERNLTRHRTLHWFRKGLRLHDNRPLLAAIRSSEAVYCVYCLDLLEWMRANERIGNNRIRFLLESITDLDENLRKI

S1 GTRLYVLTGDATTEIKKFKCKENEITQMTWMKDAEIFYRERDEEITKVVRHMEIKTKSFLGHTLYDQDEVIAKNGG  
 S2 GTRLFVLRGNARTAIKTFCREYEITQMTYMRDAEVFYRQLEAEILEEVNRREIVTRSDHGHTLYDPQETIDANEG

S1 KIPMDLSEFYAAIADMEQPGAPCPTVTAKHFKSCIAPAVDNHESTYGIPKISVWGHQAPRSLPIYRGGERQALKA  
 S2 QVPLSLDEFYSVIPSLDVPALPAPTVTAEEMFKSCSVRIEENHQAIYGVPTMASLGLECPRAHTRWPGGETVALER

S1 LQAKINDPTLFTLNGFNQGVKT.....KLPHTTYLSAYQNYGCISTRHFWKAABKLSESKT  
 S2 LKYKMKQNTLYE...FNQGPSTSKAANHEYEIPTGSEPWFETQPETTGLSPYINLGSISPRTFWHCAENCSEKMR

S1 IMLRGQIMYREFFYVAASQVNNFTKMAGNRICRQIEWYKNE.....  
 S2 TTVQGQMIYREFFYTVAYTVNNFTRIEGNRICKDIKWSDPKTNERAAEWIEKFKQGMTGYPWIDA AVRQMKTEGW

S1 .....  
 S2 ITHISRFSLASFLT VGMWCSWEVGQQLFEEFLLDADYALNAGNFLWVTGSAFANQIPVKALDPVKLARKWDTDG

S1 .....  
 S2 SFIRRYCPELKNLPTQYICAPWKAPQDVQLKARAIIGVDYPAPMLNAATMRIQNLNKIKAHNQQIRPESDSERDS

S1 ...  
 S2 ESP

[X] non-conserved  
 [X] similar  
 [X] ≥ 50% conserved  
 [X] ≥ 70% conserved

Figure 1: *Oikopleura dioica* CRY2

S1 - TRINITY DN4901 c0 g1 i3.p1 ORFtype complete len 319

S2 - TRINITY DN8133 c0 g1 i4.p1 ORFtype complete len 525