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pUB6060      1-----MANQALTLFNDRLPHKPYFSDDLQFGVRIAGKERALLAKYIQFNQPHAMWLCFDVDRAGAAIDWA80
pYe4449-1    MHRAKQQPAIAQARLSNQALDLFNERLRKPYFTDELQFGVRIAGKERAILAKYIQFNQPHAMFWLGFDVDRPGAAIDWS
pHW66        -----MTKPALDLFNERLRKPYFSDDLHFGVRIAGKERAILAKYIQFNQPHAMFWLGFDVDRLGAAIDWS
E. tasmaniensis Et1/99 -----MTNPALDLFNDRLPHKPYFSDDLHFGVRIAGKERAILAKYIQFNQPHAMFWLGFDVDRLGAAIDWS

pUB6060      81-----DLGAPAPTLTIKNPDNGHAHLLYALNIAVRTAPDGRGLLKYAAAIENALRKLGADABYSGLICKNPNNHLLHWQITVWQP160
pYe4449-1    DRNAPAPTLTIKNPDNGHAHLLYALNIAVRTAPDGRGLLKYAAAIENALRKLGADABYSGLICKNPNNHLLHWQITVWQP
pHW66        DRNAPAPTLTIKNPDNGHAHLLYALNIAVRTAPDGRGLLKYAAAIENALRKLGADABYSGLICKNPNNHLLHWQITVWQP
E. tasmaniensis Et1/99 DRNAPAPTLTIKNPDNGHAHLLYALNIAVRTAPDGRGLLKYAAAIENALRKLGADABYSGLICKNPNNHLLHWQITVWQP

pUB6060      161-----ELYTLDWLADYLDLGAANDREILPDYGLGRNCTLFDKTRKWAYRAIRQGWPPEYSQWLQACIERAKAYNLQFSAPLDENEV240
pYe4449-1    ELYTLDWLADSLDLNAANDKEIVADYGLGRNCTLFDKTRKWAYRAIRQGWPPEYSQWLQACIERARAYNLQFSAPLDETEV
pHW66        ELYTLDWLADSLDLNAANDKEIVADYGLGRNCTLFDKTRKWAYRAIRQGWPPEYSQWLQACIERSSAYNLQFAMPLDESEV
E. tasmaniensis Et1/99 ELYTLDWLADSLDLNAANDKEIVADYGLGRNCTLFDKTRKWAYRAIRQGWPPEYSQWLQACIERARAYNLQFAMPLDENEV

pUB6060      241-----MGIAKSISKWTIMVTYRSLGFDEYVKLTHSPEVQAYRGRRSKGGGRP-SIGEF-----LUALGISRSYFRWKKLGLK---320
pYe4449-1    SGIAKSIKWTYKNFSEANFLQYIADTHSSEIQSKRGMKSRGGGRPKIVGSP-----MLNLGISRSKWTYRDFRGL-----
pHW66        FGVARSIAKWTSKNFSESDFIKYVNVTHISSIQSKRGKKSKGGGRKLNVNSESQKKPNIEIGISRSTYYRKKNDGKNNQV
E. tasmaniensis Et1/99 NSIAKSIKWTSGKFESESLDFLLEHTSLIFNQSEESVVKVEVAPFLVILG---RNKKLVGLPILEN-----

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Additional file 3: The RepA-like protein of the *E. tasmaniensis* Et/99 chromosome diverges at its C-terminus from plasmid RepA proteins. The RepA sequences of pHW66 and pYe4449-1 were translated from the nucleotide sequence while RepA of pUB6060 and *E. tasmaniensis* Et1/99 were retrieved from databases. Colour codes as in Additional file 2.