Characterization of the mRNA untranslated regions [UTR] of the *Trypanosoma cruzi* LYT1 isoforms derived by alternative *trans*-splicing

Suppl. 9. Multiple alignment of the complete 3´ UTR-II sequence from *T. cruzi* isolates listed in Table 1 and those sequences obtained in this study from 058PUJ (GenBank ID: KU973678) and D.A. (GenBank ID: KU973679) isolates. Sequences were aligned with CLUSTAL Omega [1.2.4] program. Numbers on the right correspond to the nucleotide position in the sequence. An asterisk means that nucleotides are identical in all sequences show in the alignment. The motifs of RNA are indicated in bold. The polymorphisms present in the RNA motifs are shown in red.

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JR_cl._4      AGUCUUUAGCAUUAGGGAUGACAAUCAUAGUCG-UUUGCAGCUUCGUUGAGGUUGGUACC    59
Dm28c         AGUCUUUAGCAUUAGGGAUGACAAUCAUAGUCG-UUUGCAGCUUCGUUGAGGUUGGUACC    59
Sylvio_X10/1  AGUCUUUAGCAUUAGGGAUGACAAUCAUAGUCG-UUUGCAGCUUCGUUGAGGUUGGUACC    59
KU973678.1    AGUCUUUAGCAUUAGGGAUGACAAUCAUAGUCG-UUUGCAGCUUCGUUGAGGUUGGUACC    59
KU973679.1    AGUCUUUAGCAUUAGGGAUGACAAUCAUAGUCG-UUUGCAGCUUCGUUGAGGUUGGUACC    59
CLBrenerEL    AAUCCUUUAGCAUUAGGGAUGACAAUCAUAGUCG-UUUGCAGCUUCGUUUAAGGUUGGUACC  59
Esmeraldo     AGUCUUUAGCAUUAGGGAUGACAAUCAUAGUCGUUUUGCAGCUUCGUUGAGGUUGGUACA    60
Y             AGUCUUUGGCAUUAGGGAUGACAAUCAUAGUCGUUUUGCAGCUUCGUUGAGGUUGGUACA    60
CLBrenerNEL   AAUCCUUUAGCAUUAGGGAUGACAAUCAUAGUCG-UUUGCAGCUUUAAGGUUGGUACC     59
CLBrener      AGUCUUUGGCAUUAGGGAUGACAAUCAUAGUCGUUUUGCAGCUUCGUUGAGGUUGGUACA    60
Tula.C12      AGUCUUUGGCAUUAGGGAUGACAAUCAUAGUCGUUUUGCAGCUUCGUUGAGGUUGGUACA    60
Marinkellei   GGGUUUAGCAUUAGGGAUGACAAUCAUAGUCG-UUUGCAGCUUUGUUGACUUUGUUAUC     59
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JR_cl._4      UUCAGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACGCACA--CACACACAUACAA  117
Dm28c         UUCAGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACGCACA--CACACACAUACAA  117
Sylvio_X10/1  UUCAGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACGCACA--CACACACAUACAA  117
KU973678.1    UUCAGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACGCACACACACACACAUACAA  119
KU973679.1    UUCAGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACGCACACACACACACAUACAA  119
CLBrenerEL    UUCAGAGAAUUGUAUCUGCACCCUGUGCAGUGAUACACACACA-------CACAUACAA   111
Esmeraldo     UUCUGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACACAC-------ACAUACAA   112
Y             UUCUGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACACAC--A----CACAUACAA  114
CLBrenerNEL   UUCAGAGAAUUGUAUCUGCACCCUGUGCAGUGAUACACACACA-------CACAUACAA   111
CLBrener      UUCUGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACACAC--ACACACAUACAA   118
Tula.C12      UUCUGAGAAUUGUAUCUGCACAGGGUGCAGUGAUACACACACAC--ACACACAUACAA   118
Marinkellei   UUCAGAGAAUUGUAUCUGCACAGGGUGCAAUGAUACA-------------CACAUACAA   105
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JR_cl._4      AUACAUGUACACUUAUGUUUUUUGCCAUCUACCAAGAGGGGCGAGGAGUGAGUGGAAAUG  177
Dm28c         AUACAUGUACACUUAUGUUUUUUGCCAUCUACCAAGAGGGGCGAGGAGUGAGUGGAAAUG  177
Sylvio_X10/1  AUACAUGUACACUUAUGUUUUUUGCCAUCUACCAAGAGGGGCGAGGAGUGAGUGGAAAUG  177
KU973678.1    AUACAUGUACACUUAUGUUUUUUGCCAUCUACCAAGAGGGGCGAGGAGUGAGUGGAAAUG  179
KU973679.1    AUACAUGUACACUUAUGUUUUUUGCCAUCUACCAAGAGGGGCGAGGAGUGAGUGGAAAUG  179
CLBrenerEL    AUACAUGUACACUUAUGUCUUUUGCUAUCUACCAGGAGGGGCGAGGAGUGAGUGGAAAUG  171
Esmeraldo     AUACAUGUACACUUAUGUUGUUUGCUAUCUACCAGGAGGGGUGACGAGUGAGUGGAAAUG  172
Y             AUACAUGUACACUUAUGUUGUUUGCUAUCUACCAGGAGGGGUGACGAGUGAGUGGAAAUG  174
CLBrenerNEL   AUACAUGUACACUUAUGUCUUUUGCUAUCUACCAGGAGGGGCGAGGAGUGAGUGGAAAUG  171
CLBrener      AUACAUGUACACUUAUGUUGUUUGCUAUCUACCAGGAGGGGUGAGGAGUGAGUGGAAAUG  178
Tula.C12      AUACAUGUACACUUAUGUUGUUUGCUAUCUACCAGGAGGGGUGAGGAGUGAGUGGAAAUG  178
Marinkellei   AUACAUGUACACUUAUGUUGUUUGCUAUCUACCAGGAGGGAUGAGGGGGAAGUGGAAAUG  165
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JR_cl._4      AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCUGGAGAAG  237
Dm28c         AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCUGGAGAAG  237
Sylvio_X10/1  AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCUGGAGAAG  237
KU973678.1    AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCUGGAGAAG  239
KU973679.1    AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCUGGAGAAG  239
CLBrenerEL    AGCAAGCGGGUGAAACUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCAGGAGGAG  231
Esmeraldo     AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCAGGAGAAU  232
Y             AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCAGGAGAAU  234
CLBrenerNEL   AGCAAGCGGGUGAAACUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCAGGAGGAG  231
CLBrener      AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUUCCGGCGACGCGAAGAGCAGGAGAAU  238
Tula.C12      AGCAAGCGGGUGAAAGUUUUCUUCCUCACAGUCUCCCGGCGACGCGAAGAGCAGGAGAAU  238
Marinkellei   AACAGGCGCGUGAAAGUUUUCUUCCUCACAGCUUCCCGGCGACGCGAAGAGCAGGAGAAA  225
              * ** *** ******* ***********    * ***************** **** *

JR_cl._4      GGAGGUUACGAUGCGAGAAGAAGAAGAAAAAA--AA---------AAAAAGAAAGAAGUAA  286
Dm28c         GGAGGUUACGAUGCGAGAAGAAGAAGAAGAAG-AAA---------AAAAAGAAAGAAGUAA  287
Sylvio_X10/1  GGAGGUUACGAUGCGAGAAGAAGAAGAA---A--AA---------AAAAAGAAAGAAGUAA  283
KU973678.1    GGAGGUUACGAUGCGAGAAGAAGAAGAAGAAG-AAA---------AAAAAGAAAGAAGUAA  289
KU973679.1    GGAGGUUACGAUGCGAGAAGAAGAAGAAGAAG-AAA---------AAAAAGAAAGAAGUAA  289
CLBrenerEL    GGAGGUUACAAUGCGAGAAGAAGAAGAAGAAG-AAAAA-AGAAAAAAAAAAGAAAGAAGUAA  289
Esmeraldo     GGAAGUUACAAUGCGAGAAGAAGAAGAAGAAG-AAAGGAAAAAAAAAAAAUAAGGAAGUAA  291
Y             GGAAGUUACAAUGCGAGAAGAAGAAGAAGAAA-GAAAAAAAAAAAAUAGAGGGGAAGUAA   293
CLBrenerNEL   GGAGGUUACAAUGCGAGAAGAAGAAGAAGAAG-AAAAA-AGAAAAAAAAAAGAAAGAAGUAA  289
CLBrener      GGGAAGUCAAUGCCGAGAAGAAGAAGAAGAAGAAGGAAAAAAAAAAAAAUAUAGGGAAGUAA  298
Tula.C12      GGAAGUUACAAUGCGAGAAGAAGAAGAAGAAG-AAG--GAAAAAAAAAAUAAAGGAAGUAA  295
Marinkellei   AGAAGUACAAUGCGAUAAGAAAAAAAAGGAA-AAUAA---------------------   261
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