Additional file 2:

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Kond            ATGTCATCAACAAAGACAATAATGGAAACTATATACCTAATTCTCTCTCTCTTCTTCTTC 60
Ler             ATGTCATCAACAAAGACAATAATGGAAACTATATACCTAATTCTCTCTCTCTTCTTCTTC 60
Est             ATGTCATCAACAAAGACAATAATGGAAACTATATACCTAATTCTCTCTCTCTTCTTCTT- 59
Col-0           ATGTCATCAACAAAGACAATAATGGAAACTATATACCTAATTCTCTCTCTCTTCTTCTTC 60
Est-1           ATGTCATCAACAAAGACAATAATGGAAACTATATACCTAATTCTCTCTCTCTTCTTCTTC 60
Tsu-1           ATGTCATCAACAAAGACAATAATGGAAACTATATACCTAATTCTCTCTCTCTTCTTCTTC 60
An-1            ATGTCATCAACAAAGACAATAATGGAAACTATATACCTAATTCTCTCTCTCTTCTTCTTC 60
Est-1*          ATGTCATCAACAAAGACAATAATGGAAACTATATACCTAATTCTCTCTCTCTTCTTCTTC 60
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Kond            TTCATCTTCCTATCTCTCAAACTCGTGTTCGGCCCACGGCCACGTAAACTAAACCTACCG 120
Ler             TTCATCTTCCTATCTCTCAAACTCGTGTTCGGCCCACGGCCACGTAAACTAAACCTACCG 120
Est             --CATCTTCCTATCTCTCAAACTCTTGTTCGGCCCACGGCCGCGTAAACTAAACCTACCG 117
Col-0           TTCATCTTCCTATCTCTCAAACTCTTGTTCGGACCACGGCCGCGTAAACTAAACCTACCG 120
Est-1           TTCATCTTCCTATCTCTCAAACTCTTGTTCGGACCACGGCCGCGTAAACTAAACCTACCG 120
Tsu-1           TTCATCTTCCTATCTCTCAAACTCTTGTTCGGACCACGGCCGCGTAAACTAAACCTACCG 120
An-1            TTCATCTTCCTATCTCTCAAACTCTTGTTCGGACCACGGCCGCGTAAACTAAACCTACCG 120
Est-1*          TTCATCTTCCTATCTCTCAAACTCTTGTTCGGACCACGGCCGCGTAAACTAAACCTACCG 120
                  ********************** ******* ******** ******************

Kond            CCGAGTCCGAGTCGACCATTTCCGATCATCGGACACCTCCACCTTCTAAAGCTACCACTC 180
Ler             CCGAGTCCGAGTCGACCATTTCCGATCATCGGACACCTCCACCTTCTAAAGCTACCACTC 180
Est             CCTAGTCCGAGTCGACCATTTCCGGTCATCGGACACCTCCACCTTCTAAAGCTACCACTC 177
Col-0           CCGAGTCCGAGTCGACCATTTCCGATCATCGGACACCTCCACCTTCTAAAGCTACCACTC 180
Est-1           CCGAGTCCGAGTCGACCATTTCCGATCATCGGACACCTCCACCTTCTAAAGCTACCACTC 180
Tsu-1           CCGAGTCCGAGTCGACCATTTCCGATCATCGGACACCTCCACCTTCTAAAGCTACCACTC 180
An-1            CCGAGTCCGAGTCGACCATTTCCGATCATCGGACACCTCCACCTTCTAAAGCTACCACTC 180
Est-1*          CCGAGTCCGAGTCGACCATTTCCGATCATCGGACACCTCCACCTTCTAAAGCTACCACTC 180
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Kond            CACCGTAGATTTCTCTCTCTCTCAGAATCTTTAAACAACGCCAAGATATTCTCTCTTCGC 240
Ler             CACCGTAGATTTCTCTCTCTCTCAGAATCTTTAAACAACGCCAAGATATTCTCTCTTCGC 240
Est             CACCGTAGATTTCTCTCTCTCTCAGAATCTTTAAACGACGCCAAAATATTCTCTCTTCGC 237
Col-0           CACCGTAGATTTCTCTCTCTCTCAGAATCTTTAAACAACGCCAAGATTTTCTCTCTCAGC 240
Est-1           CACCGTAGATTTCTCTCTCTCTCAGAATCTTTAAACAACGCCAAGATTTTCTCTCTCAGC 240
Tsu-1           CACCGTAGATTTCTCTCTCTCTCAGAATCTTTAAACAACGCCAAGATTTTCTCTCTCAGC 240
An-1            CACCGTAGATTTCTCTCTCTCTCAGAATCTTTAAACAACGCCAAGATTTTCTCTCTCAGC 240
Est-1*          CACCGTAGATTTCTCTCTCTCTCAGAATCTTTAAACAACGCCAAGATTTTCTCTCTCAGC 240
                ********************************** ******* ** ********  **

Kond            CTCGGCTCTCGACTAGTTTTTGTTGTTTCTTCACACGCCGTGGCGGAAGAATGTTTCACT 300
Ler             CTCGGCTCTCGACTAGTTTTTGTTGTTTCTTCACACGCCGTGGCGGAAGAATGTTTCACT 300
Est             CTCGGCTCTCGTCTAGTTTTTGTTGTTTCTTCTCACGCCGTCGCTGAAGAATGTTTCACT 297
Col-0           CTCGGCTCTCGTCTAGTTTTTGTTGTTTCTTCTCACGCCGTCGCGGAAGAATGTTTCACT 300
Est-1           CTCGGCTCTCGTCTAGTTTTTGTTGTTTCTTCTCACGCCGTCGCGGAAGAATGTTTCACT 300
Tsu-1           CTCGGCTCTCGTCTAGTTTTTGTTGTTTCTTCTCACGCCGTCGCGGAAGAATGTTTCACT 300
An-1            CTCGGCTCTCGTCTAGTTTTTGTTGTTTCTTCTCACGCCGTCGCGGAAGAATGTTTCACT 300
Est-1*          CTCGGCTCTCGTCTAGTTTTTGTTGTTTCTTCTCACGCCGTCGCGGAAGAATGTTTCACT 300
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Kond            AAGAACGACGTCGTGTTAGCTAACCGGCCGGAGTTTCTCGTCGGGAAACATATAGGGTAC 360
Ler             AAGAACGACGTCGTGTTAGCTAACCGGCCGGAGTTTCTCGTCGGGAAACATATAGGGTAC 360
Est             AAGAACGACGTCGTGTTAGCTAACCGGCCGGAGTTTCTCGTCGGGAAACATATAGGGTAC 357
Col-0           AAGAACGACGTCGTGTTAGCTAACCGGCCGGAGTTTCTCGTCGGGAAACATATAGGGTAC 360
Est-1           AAGAACGACGTCGTGTTAGCTAACCGGCCGGAGTTTCTCGTCGGGAAACATATAGGGTAC 360
Tsu-1           AAGAACGACGTCGTGTTAGCTAACCGGCCGGAGTTTCTCGTCGGGAAACATATAGGGTAC 360
An-1            AAGAACGACGTCGTGTTAGCTAACCGGCCGGAGTTTCTCGTCGGGAAACATATAGGGTAC 360
Est-1*          AAGAACGACGTCGTGTTAGCTAACCGGCCGGAGTTTCTCGTCGGGAAACATATAGGGTAC 360
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Kond            AACTCTACGACCATGGTTGGCGCGGCTTAAGGAGATAGTTGGAGGAATCTTCGACGTATT 420
Ler             AACTCTACGACCATGGTTGGCGCGGCTTAAGGAGATAGTTGGAGGAATCTTCGACGTATT 420
Est             AACTCTACGACCATGGTTGGCGCGGCTTAAGGAGATAGTTGGAGGAATCTTCGACGTATT 417
Col-0           AACTCTACGACCATGGTTGGTGCGGCTTATGGAGATAGTTGGAGGAATCTTCGACGTATT 420
Est-1           AACTCTACGACCATGGTTGGTGCGGCTTATGGAGATAGTTGGAGGAATCTTCGACGTATT 420
Tsu-1           AACTCTACGACCATGGTTGGTGCGGCTTATGGAGATAGTTGGAGGAATCTTCGACGTATT 420
An-1            AACTCTACGACCATGGTTGGTGCGGCTTATGGAGATAGTTGGAGGAATCTTCGACGTATT 420
Est-1*          AACTCTACGACCATGGTTGGTGCGGCTTATGGAGATAGTTGGAGGAATCTTCGACGTATT 420
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Kond            GGCACCATTGAGATCTTCTCGTCTCTTAGGCTTAATAGCTTCGTATCTATCCGTCACGAT 480
Ler             GGCACCATTGAGATCTTCTCGTCTCTTAGGCTTAATAGCTTCGTATCTATCCGTCACGAT 480
Est             GGCACCATTGAGATCTTCTCGTCTCTTAGGCTTAATAGCTTCGTATCTATCCGTCACGAT 477
Col-0           GGCACCATTGAGATCTTCTCGTCTCTTAGGCTTAATAGCTTCGTATCTATCCGTCAAGAT 480
Est-1           GGCACCATTGAGATCTTCTCGTCTCTTAGGCTTAATAGCTTCGTATCTATCCGTCAAGAT 480
Tsu-1           GGCACCATTGAGATCTTCTCGTCTCTTAGGCTTAATAGCTTCGTATCTATCCGTCAAGAT 480
An-1            GGCACCATTGAGATCTTCTCGTCTCTTAGGCTTAATAGCTTCGTATCTATCCGTCAAGAT 480
Est-1*          GGCACCATTGAGATCTTCTCGTCTCTTAGGCTTAATAGCTTCGTATCTATCCGTCAAGAT 480
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Kond            GAGATCCGACGGCTCATAATTTGTCTAGCGAAAAACTCTCAACATGGGTTTGTGAAAGTG 540
Ler             GAGATCCGACGGCTCATAATTTGTCTAGCGAAAAACTCTCAACATGGGTTTGTGAAAGTG 540
Est             GAGATCCGACGGCTCATAATTTGTCTAGCGAAAAACTCTCAACATGGGTTTGTGAAAGTG 537
Col-0           GAGATCCGACGGCTCATAATTTGTCTAGCGAAAAACTCTCAACATGGGTTTGTGAAAGTG 540
Est-1           GAGATCCGACGGCTCATAATTTGTCTAGCGAAAAACTCTCAACATGGGTTTGTGAAAGTG 540
Tsu-1           GAGATCCGACGGCTCATAATTTGTCTAGCGAAAAACTCTCAACATGGGTTTGTGAAAGTG 540
An-1            GAGATCCGACGGCTCATAATTTGTCTAGCGAAAAACTCTCAACATGGGTTTGTGAAAGTG 540
Est-1*          GAGATCCGACGGCTCATAATTTGTCTAGCGAAAAACTCTCAACAAGAGTTTGTGAAAGTG 540
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Kond            GAGATGAAACCATTGTTTATGTGTTTAACTATCAACAACATCATTAGAATGGTGGCCGGA 600
Ler             GAGATGAAACCATTGTTTATGTGTTTAACTATCAACAACATCATTAGAATGGTGGCCGGA 600
Est             GAGATGAAACCATTGTTTATGTGTTTAACTATCAACAACATCATTAGAATGGTGGCCGGA 597
Col-0           GAGATGAAACCATTGTTTATGTGTTTAACTATCAACAACATCATTAGAATGGTGGCCGGA 600
Est-1           GAGATGAAACCATTGTTTATGTGTTTAACTATCAACAACATCATTAGAATGGTGGCCGGA 600
Tsu-1           GAGATGAAACCATTGTTTATGTGTTTAACTATCAACAACATCATTAGAATGGTGGCCGGA 600
An-1            GAGATGAAACCATTGTTTATGTGTTTAACTATCAACAACATCATTAGAATGGTGGCCGGA 600
Est-1*          GAGATGAAACCATTGTTTATGTGTTTAACTATCAACAACATCATTAGAATGGTGGCCGGA 600
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Kond            AAAAGATTCTACGGTGATGGAACAGAGAACGACAACGAGGCTAAACACGTGAGACAGCTA 660
Ler             AAAAGATTCTACGGTGATGGAACAGAGAACGACAACGAGGCTAAACACGTGAGACAGCTA 660
Est             AAAAGATTCTACGGTGATGGAACAGAGAACGACAACGAGGCTAAACACGTGAGACAGCTA 657
Col-0           AAAAGATTCTACGGTGATGGAACAGAGAACGACAACGAGGCTAAACACGTGAGACAGCTA 660
Est-1           AAAAGATTCTACGGTGATGGAACAGAGAACGACAACGAGGCTAAACACGTGAGACAGCTA 660
Tsu-1           AAAAGATTCTACGGTGATGGAACAGAGAACGACAACGAGGCTAAACACGTGAGACAGCTA 660
An-1            AAAAGATTCTACGGTGATGGAACAGAGAACGACAACGAGGCTAAACACGTGAGACAGCTA 660
Est-1*          AAAAGATTCTACGGTGATGGAACAGAGAACGACAACGAGGCAAAACACGTGAGACAGTTG 660
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Kond            ATTGCCGAGGTAGTTGTTAGCGGCGGCGCAGGGAACGCAGCAGACTACTTCCCTATCCTT 720
Ler             ATTGCCGAGGTAGTTGTTAGCGGCGGCGCAGGGAACGCAGCAGACTACTTCCCTATCCTT 720
Est             ATTGCCGAGGTAGTTGTTAGCGGCGGCGCAGGGAACGCAGCAGACTACTTCCCTATCCTT 717
Col-0           ATTGCCGAGGTAGTTGTTAGCGGCGGCGCAGGGAACGCAGCAGACTACTTCCCTATCCTT 720
Est-1           ATTGCCGAGGTAGTTGTTAGCGGCGGCGCAGGGAACGCAGCAGACTACTTCCCTATCCTT 720
Tsu-1           ATTGCCGAGGTAGTTGTTAGCGGCGGCGCAGGGAACGCAGCAGACTACTTCCCTATCCTT 720
An-1            ATTGCCGAGGTAGTTGTTAGCGGCGGCGCAGGGAACGCAGCAGACTACTTCCCTATCCTT 720
Est-1*          ATCGCCGAGGTAGTTGTTAGCGGCGGCGCGGGGAACGCAGCAGACTACTTCCCTATCCTT 720
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Kond            CGTTACGTAACGAACTATGAGAAACATGTTAAGAAGTTAGCAGGTCGTGTTGATGAGTTT 780
Ler             CGTTACGTAACGAACTATGAGAAACATGTTAAGAAGTTAGCAGGTCGTGTTGATGAGTTT 780
Est             CGTTACGTAACGAACTATGAGAAACATGTTAAGAAGTTAGCAGGTCGTGTTGATGAGTTT 777
Col-0           CGTTACGTAACGAACTATGAGAAACATGTTAAGAAGTTAGCAGGTCGTGTTGATGAGTTT 780
Est-1           CGTTACGTAACGAACTATGAGAAACATGTTAAGAAGTTAGCAGGTCGTGTTGATGAGTTT 780
Tsu-1           CGTTACGTAACGAACTATGAGAAACATGTTAAGAAGTTAGCAGGTCGTGTTGATGAGTTT 780
An-1            CGTTACGTAACGAACTATGAGAAACATGTTAAGAAGTTAGCAGGTCGTGTTGATGAGTTT 780
Est-1*          CGTTATGTAACGAACTATGAGAAACATGTTAAGAAGTTAGCAGGTCGTGTTGATGAGTTT 780
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Kond            TTGCAAAGTCTAGTTAACGAGAAACGTGTGGAGAAAGTAAAAGGTAACACAATGATCGAT 840
Ler             TTGCAAAGTCTAGTTAACGAGAAACGTGTGGAGAAAGTAAAAGGTAACACAATGATCGAT 840
Est             TTGCAAAGTCTAGTTAACGAGAAACGTGTGGAGAAAGTAAAAGGTAACACAATGATCGAT 837
Col-0           TTGCAAAGTCTAGTTAACGAGAAACGTGTGGAGAAAGTAAAAGGTAACACAATGATCGAT 840
Est-1           TTGCAAAGTCTAGTTAACGAGAAACGTGTGGAGAAAGTAAAAGGTAACACAATGATCGAT 840
Tsu-1           TTGCAAAGTCTAGTTAACGAGAAACGTGTGGAGAAAGTAAAAGGTAACACAATGATCGAT 840
An-1            TTGCAAAGTCTAGTTAACGAGAAACGTGTGGAGAAAGTAAAAGGTAACACAATGATCGAT 840
Est-1*          TTGCAAAGTCTAGTGAACGAGAAACGTGAGGAGAAAGTAAAAGGTAACACAATGATCGAT 840
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Kond            CATTTACTTTCTCTACAAGAAACTCAGCCTGATTACTACACGGATGTGATCATCAAAGGA 900
Ler             CATTTACTTTCTCTACAAGAAACTCAGCCTGATTACTACACGGATGTGATCATCAAAGGA 900
Est             CATTTACTTTCTCTACAAGAAACTCAGCCTGATTACTACACGGATGTGATCATCAAAGGA 897
Col-0           CATTTACTTTCTCTACAAGAAACTCAGCCTGATTACTACACGGATGTGATCATCAAAGGA 900
Est-1           CATTTACTTTCTCTACAAGAAACTCAGCCTGATTACTACACGGATGTGATCATCAAAGGA 900
Tsu-1           CATTTACTTTCTCTACAAGAAACTCAGCCTGATTACTACACGGATGTGATCATCAAAGGA 900
An-1            CATTTACTTTCTCTACAAGAAACTCAGCCTGATTACTACACGGATGTGATCATCAAAGGA 900
Est-1*          CATTTACTTTCTCTACAAGAAACTCAGCCTGATTACTACACTGATGTGATCATCAAAGGA 900
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Kond            ATCATACTTGTTATGATACTTGCCGGGACTGATACATCAGCTGGAACGTTAGAATGGGCG 960
Ler             ATCATACTTGTTATGATACTTGCCGGGACTGATACATCAGCTGGAACGTTAGAATGGGCG 960
Est             ATCATACTTGTTATGATACTTGCCGGGACTGATACATCAGCTGGAACGTTAGAATGGGCG 957
Col-0           ATCATACTTGTTATGATACTTGCCGGGACTGATACATCAGCTGGAACGTTAGAATGGGCG 960
Est-1           ATCATACTTGTTATGATACTTGCCGGGACTGATACATCAGCTGGAACGTTAGAATGGGCG 960
Tsu-1           ATCATACTTGTTATGATACTTGCCGGGACTGATACATCAGCTGGAACGTTAGAATGGGCG 960
An-1            ATCATACTTGTTATGATACTTGCCGGGACTGATACATCAGCTGGAACGTTAGAATGGGCG 960
Est-1*          ATCATACTTGTTATGATACTTGCCGGGACTGATACATCAGCTGGAACGTTAGAATGGGCG 960
                ************************************************************

Kond            ATGTCGAATTTGTTGAACCATCCAGAAGTATTACGAAAGGCAAAGACCGAAATCGACGAC 1020
Ler             ATGTCGAATTTGTTGAACCATCCAGAAGTATTACGAAAGGCAAAGACCGAAATCGACGAC 1020
Est             ATGTCGAATTTGTTGAACCATCCAGAAGTATTACGAAAGGCAAAGACCGAAATCGACGAC 1017
Col-0           ATGTCGAATTTGTTGAACCATCCAGAAGTATTACGAAAGGCAAAGACCGAAATCGACGAC 1020
Est-1           ATGTCGAATTTGTTGAACCATCCAGAAGTATTACGAAAGGCAAAGACCGAAATCGACGAC 1020
Tsu-1           ATGTCGAATTTGTTGAACCATCCAGAAGTATTACGAAAGGCAAAGACCGAAATCGACGAC 1020
An-1            ATGTCGAATTTGTTGAACCATCCAGAAGTATTACGAAAGGCAAAGACCGAAATCGACGAC 1020
Est-1*          ATGTCGAATTTGTTGAACCATCCAGAAGTATTACGAAAGGCAAAGACCGAAATCGACGAC 1020
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Kond            CAAATCGGTGTAGACCGGTTAGTAGAGGAACAAGACATTGTGAAACTTCCTTACCTTCAG 1080
Ler             CAAATCGGTGTAGACCGGTTAGTAGAGGAACAAGACATTGTGAAACTTCCTTACCTTCAG 1080
Est             CAAATCGGTGTAGACCGGTTAGTAGAGGAACAAGACATTGTGAAACTTCCTTACCTTCAG 1077
Col-0           CAAATCGGTGTAGACCGGTTAGTAGAGGAACAAGACATTGTGAAACTTCCTTACCTTCAG 1080
Est-1           CAAATCGGTGTAGACCGGTTAGTAGAGGAACAAGACATTGTGAAACTTCCTTACCTTCAG 1080
Tsu-1           CAAATCGGTGTAGACCGGTTAGTAGAGGAACAAGACATTGTGAAACTTCCTTACCTTCAG 1080
An-1            CAAATCGGTGTAGACCGGTTAGTAGAGGAACAAGACATTGTGAAACTTCCTTACCTTCAG 1080
Est-1*          CAAATCGGTGTAGACCGGTTAATAGAGGAACAAGACATTGTGAAACTTCCTTACCTTCAG 1080
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Kond            CACATTGTGTCAGAGACTTTACGGCTTTATCCGGTGGCTCCAATGCTTTTACCCCACTTA 1140
Ler             CACATTGTGTCAGAGACTTTACGGCTTTATCCGGTGGCTCCAATGCTTTTACCCCACTTA 1140
Est             CACATTGTGTCAGAGACTTTACGGCTTTATCCGGTGGCTCCAATGCTTTTACCCCACTTA 1137
Col-0           CACATTGTGTCAGAGACTTTACGGCTTTATCCGGTGGCTCCAATGCTTTTACCCCACTTA 1140
Est-1           CACATTGTGTCAGAGACTTTACGGCTTTATCCGGTGGCTCCAATGCTTTTACCCCACTTA 1140
Tsu-1           CACATTGTGTCAGAGACTTTACGGCTTTATCCGGTGGCTCCAATGCTTTTACCCCACTTA 1140
An-1            CACATTGTGTCAGAGACTTTACGGCTTTATCCGGTGGCTCCAATGCTTTTACCCCACTTA 1140
Est-1*          CACATTGTGTCAGAGACTTTACGGCTTTATCCAGTGGCTCCAATGCTTTTACCCCACTTA 1140
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Kond            GCATCAGAAGATTGTATAGTTGATGGCTATGACGTTCCACGCGGCACAATCATCTTGGTG 1200
Ler             GCATCAGAAGATTGTATAGTTGATGGCTATGACGTTCCACGCGGCACAATCATCTTGGTG 1200
Est             GCATCAGAAGATTGTATAGTTGATGGCTATGACGTTCCACGCGGCACAATCATCTTGGTG 1197
Col-0           GCATCAGAAGATTGTATAGTTGATGGCTATGACGTTCCACGCGGCACAATCATCTTGGTG 1200
Est-1           GCATCAGAAGATTGTATAGTTGATGGCTATGACGTTCCACGCGGCACAATCATCTTGGTG 1200
Tsu-1           GCATCAGAAGATTGTATAGTTGATGGCTATGACGTTCCACGCGGCACAATCATCTTGGTG 1200
An-1            GCATCAGAAGATTGTATAGTTGATGGCTATGACGTTCCACGCGGCACAATCATCTTGGTG 1200
Est-1*          GCATCAGAAAATTGTGTAGTTGATGGCTATGACGTTCCACAAGGCACAATCATCTTGGTG 1200
                ********* ***** ************************  ******************

Kond            AATGCATGGGCCATCCATAGAGATCCAAAGTTATGGGAAGAGCCAGAAAAATTTAAGCCG 1260
Ler             AATGCATGGGCCATCCATAGAGATCCAAAGTTATGGGAAGAGCCAGAAAAATTTAAGCCG 1260
Est             AATGCATGGGCCATCCATAGAGATCCAAAGTTATGGGAAGAGCCAGAAAAATTTAAGCCG 1257
Col-0           AATGCATGGGCCATCCATAGAGATCCAAAGTTATGGGAAGAGCCAGAAAAATTTAAGCCG 1260
Est-1           AATGCATGGGCCATCCATAGAGATCCAAAGTTATGGGAAGAGCCAGAAAAATTTAAGCCG 1260
Tsu-1           AATGCATGGGCCATCCATAGAGATCCAAAGTTATGGGAAGAGCCAGAAAAATTTAAGCCG 1260
An-1            AATGCATGGGCCATCCATAGAGATCCAAAGTTATGGGAAGAGCCAGAAAAATTTAAGCCG 1260
Est-1*          AATGCATGGGCCATTCATAGAGATCCAAAGTTATGGGAAGAGCCAGAAAAGTTTAAGCCG 1260
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Kond            GAGAGGTTTGAGAAAAAAGGAGAGGATAAAAAGTTGATGCCATTTGGGATTGGACGACGA 1320
Ler             GAGAGGTTTGAGAAAAAAGGAGAGGATAAAAAGTTGATGCCATTTGGGATTGGACGACGA 1320
Est             GAGAGGTTTGAGAAAAAAGGAGAGGATAAAAAGTTGATGCCATTTGGGATTGGACGACGA 1317
Col-0           GAGAGGTTTGAGAAAAAAGGAGAGGATAAAAAGTTGATGCCATTTGGGATTGGACGACGA 1320
Est-1           GAGAGGTTTGAGAAAAAAGGAGAGGATAAAAAGTTGATGCCATTTGGGATTGGACGACGA 1320
Tsu-1           GAGAGGTTTGAGAAAAAAGGAGAGGATAAAAAGTTGATGCCATTTGGGATTGGACGACGA 1320
An-1            GAGAGGTTTGAGAAAAAAGGAGAGGATAAAAAGTTGATGCCATTTGGGATTGGACGACGA 1320
Est-1*          GAGAGGTTTGAGAAAAAAGGAGAGGATAAAAAGTTGATGCCTTTTGGGATTGGACGACGA 1320
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Kond            TCTTGCCCTGGTTCAGGGCTAGCTCAACGGCTAGTGACTTTGGCTCTTGGATCATTGGTC 1380
Ler             TCTTGCCCTGGTTCAGGGCTAGCTCAACGGCTAGTGACTTTGGCTCTTGGATCATTGGTC 1380
Est             TCTTGCCCTGGTTCAGGGCTAGCTCAACGGCTAGTGACTTTGGCTCTTGGATCATTGGTC 1377
Col-0           TCTTGCCCTGGTTCAGGGCTAGCTCAACGGCTAGTGACTTTGGCTCTTGGATCATTGGTC 1380
Est-1           TCTTGCCCTGGTTCAGGGCTAGCTCAACGGCTAGTGACTTTGGCTCTTGGATCATTGGTC 1380
Tsu-1           TCTTGCCCTGGTTCAGGGCTAGCTCAACGGCTAGTGACTTTGGCTCTTGGATCATTGGTC 1380
An-1            TCTTGCCCTGGTTCAGGGCTAGCTCAACGGCTAGTGACTTTGGCTCTTGGATCATTGGTC 1380
Est-1*          TCTTGTCCTGGTTCAGGGCTAGCTCAACGGCTAGTGACCTTGGCTCTAGGATCGTTGGTA 1380
                ***** ******************************** ******** ***** *****

Kond            CAATGTTTTGAGTGGGAGAGGGTTGAAGAAAAGTATCTAGACATGAGAGAAAGTGAAAAA 1440
Ler             CAATGTTTTGAGTGGGAGAGGGTTGAAGAAAAGTATCTAGACATGAGAGAAAGTGAAAAA 1440
Est             CAATGTTTTGAGTGGGAGAGGGTTGAAGAAAAGTATCTAGACATGAGAGAAAGTGAAAAA 1437
Col-0           CAATGTTTTGAGTGGGAGAGGGTTGAAGAAAAGTATCTAGACATGAGAGAAAGTGAAAAA 1440
Est-1           CAATGTTTTGAGTGGGAGAGGGTTGAAGAAAAGTATCTAGACATGAGAGAAAGTGAAAAA 1440
Tsu-1           CAATGTTTTGAGTGGGAGAGGGTTGAAGAAAAGTATCTAGACATGAGAGAAAGTGAAAAA 1440
An-1            CAATGTTTTGAGTGGGAGAGGGTTGAAGAAAAGTATCTAGACATGAGAGAAAGTGAAAAA 1440
Est-1*          CAATGTTTTGAGTGGGAGAGAGTTGGAGAAAAGTATCTAGACATGAGAGAAAGTGAAAAA 1440
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Kond            GGAACCACAATGCGAAAAGCTACATCGTTGCAAGCTATGTGTAAAGCTCGTCCCATTGTC 1500
Ler             GGAACCACAATGCGAAAAGCTACATCGTTGCAAGCTATGTGTAAAGCTCGTCCCATTGTC 1500
Est             GGAACCACAATGCGAAAAGCTACATCGTTGCAAGCTATGTGTAAAGCTCGTCCCATTGTC 1497
Col-0           GGAACCACAATGCGAAAAGCTACATCGTTGCAAGCTATGTGTAAAGCTCGTCCCATTGTC 1500
Est-1           GGAACCACAATGCGAAAAGCTACATCGTTGCAAGCTATGTGTAAAGCTCGTCCCATTGTC 1500
Tsu-1           GGAACCACAATGCGAAAAGCTACATCGTTGCAAGCTATGTGTAAAGCTCGTCCCATTGTC 1500
An-1            GGAACCACAATGCGAAAAGCTACATCGTTGCAAGCTATGTGTAAAGCTCGTCCCATTGTC 1500
Est-1*          GGAACCACGATGCGCAAAGCTACATCGTTGCAAGCTATGTGTAAAGCTCGTCCCATTGTC 1500
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Kond            CATAAGGTTTTAGATGCTTCTTGTCCATAA 1530
Ler             CATAAGGTTTTAGATGCTTCTTGTCCATAA 1530
Est             CATAAGGTTTTAGATGCTTCTTGTCCATAA 1527
Col-0           CATAAGGTTTTAGATGCTTCTTGTCCATAA 1530
Est-1           CATAAGGTTTTAGATGCTTCTTGTCCATAA 1530
Tsu-1           CATAAGGTTTTAGATGCTTCTTGTCCATAA 1530
An-1            CATAAGGTTTTAGATGCTTCTTGTCCATAA 1530
Est-1*          CATAAGGTTTTAGATGCTTCTTGTCCATAA 1530
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Figure S2. Multiple Sequence Alignment of coding sequences of *AtCYP81D11* gene produced by CLUSTALW. The following sequences were taken from the 1001 Genomes Project database (www.1001genomes.org): Kond, L*er*, Est, Col-0, Est-1, Tsu-1, An-1 (Kas-2 sequence was not available in the database). The selected sequences originate from accessions, which were used in the initial screening of natural variation in scopolin and scopoletin accumulation. The Est-1* sequence was obtained after re-sequencing of Est-1 accession from our laboratory.