

A

**U5 LRI**

AF228550.1 GCAACAGUCUUAUAUUCACGUCUCUGUGUUUUGUGUCUGUUGGCCAUCCCGUCUCCGCU 60  
 L37517.1 -----GUCCUUAACUAUCACGUCUCUGUGUUUUGUGUCUGUUGGCCAUCCCGUCUCCGCU 54  
 AF033807.1 GCAACAGUCUUAACUAUUCACGUCUCUGUGUUUUGUGUCUGUUGGCCAUCCCGUCUCCGCU 60  
 M15122.1 GCAACAGUCUUAACUAUUCACGUCUCUGUGUUUUGUGUCUGUUGGCCAUCCCGUCUCCGCU 60  
 D16249.1 GCAACAGUCUUAACUAUUCACGUCUCUGUGUUUUGUGUCUGUUGGCCAUCCCGUCUCCGCU 60  
 AF228551.1 GCAACAGUCUUAUAUUCACGUCUCUGUGUUUUGUGUCUGUUGGCCAUCCCGUCUCCGCU 60  
 X00018.1 GCAACAGUCUUAACUAUUCACGUCUCUGUGUUUUGUGUCUGUUGGCCAUCCCGUCUCCGCU 60  
 AF228552.1 GCAACAGUCUUAACUAUUCACGUCUCUGUGUUUUGUGUCUGUUGGCCAUCCCGUCUCCGCU 60  
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**pal I**

AF228550.1 CGUCACUUAUCCUUCACUUUCAGAGGGUCCCCCGCAGACCCCGGUGACCCUUCAGGUGG 120  
 L37517.1 CGUCACUUAUCCUUCACUUUCAGAGGGUCCCCCGCAGACCCCGGUGACCCUUCAGGUGG 114  
 AF033807.1 CGUCACUUAUCCUUCACUUUCAGAGGGUCCCCCGCAGACCCCGGUGACCCUUCAGGUGG 120  
 M15122.1 CGUCACUUAUCCUUCACUUUCAGAGGGUCCCCCGCAGACCCCGGUGACCCUUCAGGUGG 120  
 D16249.1 CGUCACUUAUCCUUCACUUUCAGAGGGUCCCCCGCAGACCCCGGUGGCCCCUGGUGG 120  
 AF228551.1 CGUCACUUAUCCUUCACUUUCAGAGGGUCCCCCGCAGACCCCGGUGACCCUUCAGGUGG 120  
 X00018.1 CGUCACUUAUCCUUCACUUUCAGAGGGUCCCCCGCAGACCCCGGUGACCCUUCAGGUGG 120  
 AF228552.1 CGUCACUUAUCCUUCACUUUCAGAGGGUCCCCCGCAGACCCCGGUGACCCUUCAGGUGG 120  
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**pal sequences within PBS**

AF228550.1 GCGGACUGCGCAGCUGGGGCCGGAACAGGGACCCUCGGAUAAGUGACCCUUGUCUCUAU 180  
 L37517.1 GCGGACUGCGCAGCUGGGGCCGGAACAGGGACCCUCGGAUAAGUGACCCUUGUCUCUAU 174  
 AF033807.1 GCGGACUGCGCAGCUGGGGCCGGAACAGGGACCCUCGGAUAAGUGACCCUUGUCUCUAU 180  
 M15122.1 GCGGACUGCGCAGCUGGGGCCGGAACAGGGACCCUCGGAUAAGUGACCCUUGUCUCUAU 180  
 D16249.1 GCGGACUGCGCAGCUGGGGCCGGAACAGGGACCCUCGGAUAAGUGACCCUUGUCUCUAU 180  
 AF228551.1 GCGGACUGCGCAGCUGGGGCCGGAACAGGGACCCUCGGAUAAGUGACCCUUGUCUCUAU 180  
 X00018.1 GCGGACUGCGCAGCUGGGGCCGGAACAGGGACCCUCGGAUAAGUGACCCUUGUCUCUAU 180  
 AF228552.1 GCGGACUGCGCAGCUGGGGCCGGAACAGGGACCCUCGGAUAAGUGACCCUUGUCUCUAU 180  
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**PBS**

AF228550.1 UUCUACUAUUUGGUGUUGUCUUGUAUUGUCUCUUUCUUGUCUGGCUAUAUCAACAAGAG 240  
 L37517.1 UUCUACUAUUUGGUGUUGUCUUGUAUUGUCUCUUUCUUGUCUGGCUAUAUCAACAAGAG 234  
 AF033807.1 UUCUACUAUUUGGUGUUGUCUUGUAUUGUCUCUUUCUUGUCUGGCUAUAUCAACAAGAG 240  
 M15122.1 UUCUACUAUUUGGUGUUGUCUUGUAUUGUCUCUUUCUUGUCUGGCUAUAUCAACAAGAG 240  
 D16249.1 UUCUACUAUUUGGUGUUGUCUUGUAUUGUCUCUUUCUUGUCUGGCUAUAUCAACAAGAG 240  
 AF228551.1 UUCUACUAUUUGGUGUUGUCUUGUAUUGUCUCUUUCUUGUCUGGCUAUAUCAACAAGAG 240  
 X00018.1 UUCUACUAUUUGGUGUUGUCUUGUAUUGUCUCUUUCUUGUCUGGCUAUAUCAACAAGAG 240  
 AF228552.1 UUCUACUAUUUGGUGUUGUCUUGUAUUGUCUCUUUCUUGUCUGGCUAUAUCAACAAGAG 240  
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**pal II ssPurines**

AF228550.1 CGGAACGGACUCACCAUAGGGGACUGCAGUCCCGCCUACGGAGAGAGGUAGGUUACGGU 300  
 L37517.1 CGGAACGGACUCACCAAGGGGACUGCAGUCCCGCCUACGGAGAGAGGUAGGUUACGGU 294  
 AF033807.1 CGGAACGGACUCACCAAGGGGACUGCAGUCCCGCCUACGGAGAGAGGUAGGUUACGGU 300  
 M15122.1 CGGAACGGACUCACCAAGGGGACUGCAGUCCCGCCUACGGAGAGAGGUAGGUUACGGU 300  
 D16249.1 CGGAACGGACUCACCAAGGGGACUGCAGUCCCGCCUACGGAGAGAGGUAGGUUACGGU 300  
 AF228551.1 CGGAACGGACUCACCAAGGGGACUGCAGUCCCGCCUACGGAGAGAGGUAGGUUACGGU 300  
 X00018.1 CGGAACGGACUCACCAAGGGGACUGCAGUCCCGCCUACGGAGAGAGGUAGGUUACGGU 300  
 AF228552.1 CGGAACGGACUCACCAAGGGGACUGCAGUCCCGCCUACGGAGAGAGGUAGGUUACGGU 300  
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**Gag LRI**

AF228550.1 GAGCCAUGGAAAUGGGGGUCUCGGGCUAAAAGGGCAGAAAACUCUUUGUUUCUGUUUA 360  
 L37517.1 GAGCCAUGGAAAUGGGGGUCUCGGGCUAAAAGGGCAGAAAACUCUUUGUUUCUGUAUA 354  
 AF033807.1 GAGCCAUGGAAAUGGGGGUCUCGGGCUAAAAGGGCAGAAAACUCUUUGUUUCUGUUUA 360  
 M15122.1 GAGCCAUGGAAAUGGGGGUCUCGGGCUAAAAGGGCAGAAAACUCUUUGUUUCUGUUUA 360  
 D16249.1 GAGCCAUGGAAAUGGGGGUCUCGGGCUAAAAGGGCAGAAAACUCUUUGUUUCUGUUUA 360  
 AF228551.1 GAGCCAUGGAAAUGGGGGUCUCGGGCUAAAAGGGCAGAAAACUCUUUGUUUCUGUUUA 360  
 X00018.1 GAGCCAUGGAAAUGGGGGUCUCGGGCUAAAAGGGCAGAAAACUCUUUGUUUCUGUUUA 360  
 AF228552.1 GAGCCAUGGAAAUGGGGGUCUCGGGCUAAAAGGGCAGAAAACUCUUUGUUUCUGUUUA 360  
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**pal III**

AF228550.1 CAAAGGCUCCUCUCAGAGAGGGGUCUUCAGUGGAAAAGAGAGUAGGCAUAGAAUUUUUA 420  
 L37517.1 CAAAGGCUCCUCUCAGAGAGGGGUCUUCAGUGGAAAAGAGAGUAGGCAUAGAAUUUUUA 414  
 AF033807.1 CAAAGGCUCCUCUCAGAGAGGGGUCUUCAGUGGAAAAGAGAGUAGGCAUAGAGUUUUUA 420  
 M15122.1 CAAAGGCUCCUCUCAGAGAGGGGUCUUCAGUGGAAAAGAGAGUAGGCAUAGAGUUUUUA 420  
 D16249.1 CAAAGGCUCCUCUCAGAGAGGGGUCUUCAGUGGAAAAGAGAGUAGGCAUAGAAUUUUUA 420  
 AF228551.1 CAAAGGCUCCUCUCAGAGAGGGGUCUUCAGUGGAAAAGAGAGCAGCCCAUAGAGUUUUUA 420  
 X00018.1 CAAAGGCUCCUCUCAGAGAGGGGUCUUCAGUGGAAAAGAGAGUAGGCAUAGAGUUUUUA 420  
 AF228552.1 CAAAGGCUCCUCUCAGAGAGGGGUCUUCAGUGGAAAAGAGAGUAGGCAUAGAAUUUUUA 420  
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AF228550.1 CAGUUCUUAUA 432  
 L37517.1 CAGUUCUGAUA 426  
 AF033807.1 CAGUUCUUAUA 432  
 M15122.1 CAGUUCUUAUA 432  
 D16249.1 CAGUUCUUAUA 432  
 AF228551.1 CAGUUCUUAUA 432  
 X00018.1 CAGUUCUGAUA 432  
 AF228552.1 CAGUUCUUAUA 432  
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# B Additional File 1

