

**Table S3. List of mutagenesis – Related to Figures 1, 4, 6 and 7.**

<b>Mutagenesis</b>	<b>Primers</b>
<i>ScAsf1</i> V146P/T147P	F:CTGGCTGAAAAGCCAAGGCCACCAAGGTTTAAACATTGTTTGGGATA ATG R:CATTATCCCAAACAATGTAAACCTTGGTGGCCTTGGCTTTTCAGCC AG
<i>ScAsf1</i> R148E	F:GCTGAAAAGCCAAGGGTAACAGAGTTTAAACATTGTTTGGGATAATG R:CATTATCCCAAACAATGTAAACTCTGTTACCCTTGGCTTTTCAGC
<i>AfAsf1</i> V146P/T147P	F: GCTGAGAAGCCGAGACCGCCAGGTTTCGCTATCAAG R: CTTGATAGCGAACCTGGGCGGTCTCGGCTTCTCAGC
<i>AfAsf1</i> R148E	F: AAGCCGAGAGTGACCGAGTTTCGCTATCAAGTGG R: CCACTTGATAGCGAACTCGGTCACTCTCGGCTT
<i>ScH3</i> S57E	F:GAGAAATTAGAAGATTCCAAAAAGAGACTGAACTGTTGATCAGAA AGTTACC R:GGTAACTTTCTGATCAACAGTTCAGTCTCTTTTTTGAATCTTCTAAT TTCTC
<i>ScH3</i> S57K	F:GAGAAATTAGAAGATTCCAAAAAAGACTGAACTGTTGATCAGAA AGTTACC R:GGTAACTTTCTGATCAACAGTTCAGTCTTTTTTTTGAATCTTCTAAT TTCTC
<i>ScH3</i> E94R	F:CTTCTGCTATCGGTGCTTTGCAACGATCCGTCGAAGCATACTTAGTC R:GACTAAGTATGCTTCGACGGATCGTTGCAAAGCACCGATAGCAGAA G
<i>ScH4</i> R95D	F:GTTGTTTATGCTTTGAAGAGACAAGGTGATACCTTATATGGTTTCGG TGG R:CCACCGAAACCATATAAGGTATCACCTTGTCTCTTCAAAGCATAAA CAAC
<i>ScH4</i> Δ95-C	F:GCTTTGAAGAGACAAGGTTGAACCTTATATGGTTTCGGTGG R:CCACCGAAACCATATAAGGTTCAACCTTGTCTCTTCAAAGC
<i>AfRtt109</i> R265E	F: GATGATCCCAAGACAGAGTTTCTGATCGACCTG R: CAGGTCGATCAGAACTCTGTCTTGGGATCATC
<i>AfRtt109</i> R306E	F: GAGATGATGTCCTTTGAACAGGAATGTTCCGGCC R: GGCCGAACATTCTGTTCAAAGGACATCATCTC
<i>ScRtt109</i> R194A/Q198A	F:CCAAAATTTGTTTATTTACTGCACCTGCATCCGCGTACCTCTTCCCA GATTC R:GAATCTGGGAAGAGGTACGCGGATGCAGGTGCAGTAAATAAACAA ATTTGG
<i>ScRtt109</i> D248R	F:CAAAATTAAGGATACCGGGCGAACGTCCTGCTCGAGTAAGATCATA C R:GTATGATCTTACTCGAGCAGGACGTTTCGCCGGTATCCTTAATTTTG
<i>ScRtt109</i> R292E	F:CCCAGACGATCCTAAGGCTGAATTTATACACCAATTGGCAGAGG R:CCTCTGCCAATTGGTGTATAAATTCAGCCTTAGGATCGTCTGGG
<i>ScRtt109</i> R318E	F:CCTTCTGGATTGAACTACAAGAGGAGCAAGAGTTCAAATTAAGTGT C R:GACACTTAATTTGAACTCTTGCTCCTTGTAGTTCAATCCAGAAGG
<i>ScRtt109</i> Q319A	F:GGATTGAACTACAAGAGCGTGCAGAGTTCAAATTAAGTGTCACATC R:GATGTGACACTTAATTTGAACTCTGCACGCTTGTAGTTCAATCC
<i>ScRtt109</i> E369A	F:CAAGAAGTACATTACTGGAGAGGCATACGATACAGAGGAAGGCGC R:GCGCCTTCTCTGTATCGTATGCCTCTCCAGTAATGTACTTCTTG