

```

BT_sdY -----CTCCCTT--ACTAATCATTTTACATGAAAAAATGCATATC
AS_Tasmanian_Ssa02_sdY -----CTCCCCTTAACATAATCATTTTACATGAAAAAATGCATATC
AS_Tasmanian_Ssa03_sdY -----ACTCCCCTT-ACTAATCATTTTACATGAAAAAATGCATATC
AS_European_sdY GAGAGAAACACTCCCCTTAACATAATCATTTTACATGAAAAAATGCATATC
AS_Tasmanian_Ssa06_sdY -----ACTCCCCTTAACATAATCATTTTACATGAAGAAATGCATATC
Chinook_sdY -----CTCCCCTTAACATAACTTTTACATGAAAACATGCACATA
RT_sdY -----AACACTCCCCTTAACATAACTTTTACATGAAAACATGCTCATA
          ***** * ***** ***** * ***** **

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BT_sdY AAAAACTCCAGCGCATGTTTAAAAGCAGTCCTTAGAGGTTTTGAATCCAC
AS_Tasmanian_Ssa02_sdY AAAAACTCCAGCGCATGTTTAAAACAGTCCTTAGAGGTTTTGAATCCAC
AS_Tasmanian_Ssa03_sdY AAAAACTCCAGCGCATGTTTAAAACAGTCCTTAGAGGTTTTGAATCCAC
AS_European_sdY AAAAACTCCAGCGCATGTTTAAAACAGTCCTTAGAGGTTTTGAATCCAC
AS_Tasmanian_Ssa06_sdY AAAAACTCCAGCGCATGTTTAAAACAGTCCTTAGAGGTTTTGAATCCAC
Chinook_sdY AAAAACTCCAGCTCATGTTTAAAAGCCGTCCTTAGAATAGTTGAGTCCAT
RT_sdY AAAAACTCCAGCTCATGTTTAAAAGCCGTCCTTAGAATATTTGAGTCCAT
***** * ***** * ***** *****

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          |                exon1                |
          |-----Exon 1F----->             |
BT_sdY   CTGCCCTTCA | ATGGCTGACAGAGAGGCCAGATTCCAAG | GTACAGAACACA
AS_Tasmanian_Ssa02_sdY CTGCCCTTCA | ATGGTTGACAGAGAGGCCAGATTCCAAG | GTACAGAACACA
AS_Tasmanian_Ssa03_sdY CTGCCCTTCA | ATGGTTGACAGAGAGGCCAGATTCCAAG | GTACAGAACACA
AS_European_sdY CTGCCCTTCA | ATGGTTGACAGAGAGGCCAGATTCCAAG | GTACAGAACACA
AS_Tasmanian_Ssa06_sdY CTGCCCTTCA | ATGGTTGACAGAGAGGCCAGATTCCAAG | GTACAGAACACA
Chinook_sdY CTGCCCTTCA | ATGGCTGACAGAGAGGCCAGAATCCAAG | GTACAGAACACA
RT_sdY   CTGCCCTTCA | ATGGCTGACAGAGAGGCCAGAATCCAAG | GTACAGAACACA
***** * ***** * ***** *****

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BT\_sdY CAAATATTCAGTATGTTATCTAAGAGTGTTTTGATTTTCATTATTTTGGG  
AS\_Tasmanian\_Ssa02\_sdY CAAATATTCAGTATGTTATCTAAGAGTGTTTTGATTTTCATTATTTTGGG  
AS\_Tasmanian\_Ssa03\_sdY CAAATATTCAGTATGTTATCTAAGAGTGTTTTGATTTTCATTATTTTGGG  
AS\_European\_sdY CAAATATTCAGTATGTTATCTAAGAGTGTTTTGATTTTCATTATTTTGGG  
AS\_Tasmanian\_Ssa06\_sdY CAAATATTCAGTATGTTATCTAAGAGTGTTTTGATTTTCATTATTTTGGG  
Chinook\_sdY CAAACATTCAGTATGTTATGTAAGACTG-TTTGGTTTTTCATTATTTTGGG  
RT\_sdY CAAACATTCAGTATGTTATGTAAGACTG-TTTGGTTTTTCATTATTTTGGG  
\*\*\*\*\*

BT\_sdY CCTATGAATTTCTGATGTTAA-----GGACTGTATCTATGTGGTT  
AS\_Tasmanian\_Ssa02\_sdY CCTATGCATTTCTGATGTTGAACAGCTTAA-GGACTGTGTCTATGTGGTT  
AS\_Tasmanian\_Ssa03\_sdY CCTATGCATTTCTGATGTTGAACAGCTTAA-GGACTGTGTCTATGTGGTT  
AS\_European\_sdY CCTATGCATTTCTGATGTTGAACAG--AA-GGACTGTGTCTATGTGGTT  
AS\_Tasmanian\_Ssa06\_sdY CCTATGCATTTCTGATGTTGAACAGCTTAA-GGACTGTGTCTATGTGGTT  
Chinook\_sdY CCTATGAATGTCTGATGTTATAACAGCTTACTGTGCTGTGTACATGTGGTT  
RT\_sdY CCTATGAATGTCTGATGTTGTACAGCTTACTGTGCTGTGTATATGTGGTT  
\*\*\*\*\* \*\* \*\*\*\*\* \* \*\*\*\* \* \*\*\*\*\*

BT\_sdY ATTTCCATGTCTGATCTTTTGAGGGAAATGCTCAAAATGAGTATATAGCA  
AS\_Tasmanian\_Ssa02\_sdY ATTTCCATGTCTGATCTTTTGAGGGAAATGCTCAAAATGAGTATATAGCG  
AS\_Tasmanian\_Ssa03\_sdY ATTTCCATGTCTGATCTTTTGAGGGAAATGCTCAAAATGAGTATATAGCG  
AS\_European\_sdY ATTTCCATGTCTGATCTTTTGAGGGAAATGCTCAAAATGAGTATATAGCG  
AS\_Tasmanian\_Ssa06\_sdY ATTTCCATGTCTGATCTTTTGAGGGAAATGCTCAAAATGAGTATATAGCG  
Chinook\_sdY ATTTCCATGTCTGATTTT-----CATGTCT  
RT\_sdY ATTTCCATGTCTGA-----  
\*\*\*\*\*

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BT_sdY          TTTTGGGAATTAG---CTTCAGTTGTACAATTTTCATTACTATAACGTTTTTTT
AS_Tasmanian_Ssa02_sdY  TTTTGGGAATTAG---CTTCAGTTGTACAATTTTCATTACTATACTTTTTTTT
AS_Tasmanian_Ssa03_sdY  TTTTGGGAATTAG---CTTCAGTTGTACAATTTTCATTACTATACTTTTTTTT
AS_European_sdY      TTTTGGGAATTAG---CTTCAGTTGTACAATTTTCATTACTATACTTTTTTTT
AS_Tasmanian_Ssa06_sdY  TTTTGGGAATTAG---CTTCAGTTGTACAATTTTCATTACTATACTTTTTTTT
Chinook_sdY        AATTGGAATGAAACTTTTCAGTTGTACAATTTTCATTACTTAACTTTTTTTT
RT_sdY           --TTGGAATGAAACTCTTCAGTTGTACAATTTTCATTATTTAACTTTTTTTT
                ***** *          ***** *          *          *          *          *

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BT_sdY          GTGCTAATTTTATAATGTTTCATGTCGCAAATCTGTTATAAAAAGTCAGGA
AS_Tasmanian_Ssa02_sdY  GTGCTAATTTTATAATGTTTCATGTTGCAAATCTGTTATAAAAAGTCAGGA
AS_Tasmanian_Ssa03_sdY  GTGCTAATTTTATAATGTTTCATGTTGCAAATCTGTTATAAAAAGTCAGGA
AS_European_sdY      GTGCTAATTTTATAATGTTTCATGTTGCAAATCTGTTATAAAAAGTCAGGA
AS_Tasmanian_Ssa06_sdY  GTGCTAATTTTATAATGTTTCATGTTGCAAATCTGTTATAAAAAGTCAGGA
Chinook_sdY        GTGCTCATT-----GGATCATATCACAAATCTCTTATAAAAAGTCAGGA
RT_sdY           GTGCTCATT-----GGATCATATCACAAATCTCTTATAAAAAGTCAGGA
                ***** ***          *          *          *          *          *

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BT_sdY          GCTGTTCTTCTGCGAGA---CTCATTGAAATTATTTTTTTTCTCTCTCTCC
AS_Tasmanian_Ssa02_sdY  GCTGTTCTTCTGCGGGACTGCTCATTGAAATTTTGTTTTTTCTCTCTCTCT
AS_Tasmanian_Ssa03_sdY  GCTGTTCTTCTGCGGGACTGCTCATTGAAATTTTGTTTTTTCTCTCTCTCT
AS_European_sdY      GCTGTTCTTCTGCGGAGACTGCTCATTGAAATTTTGTTTTTTCTCTCTCTCT
AS_Tasmanian_Ssa06_sdY  GCTGTTCTTCTGCGAGACTGCTCATTGAACTTTTGTTTTTTCTCTCTCTCT
Chinook_sdY        GCTGTTCTTCTGCATAACTGCTCATTGCAAGTA---TTTTTTATCTC---
RT_sdY           GCTGTTCTTCTGCATAACTGCTCATTGCAAGTATTTTTTTTTTATCTC---
                ***** *          ***** *          *          *          *

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BT_sdY	CCC-----
AS_Tasmanian_Ssa02_sdY	CCCTCTCTCCCCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCCCTAACTCTC
AS_Tasmanian_Ssa03_sdY	CCCTCTCTCCCC--CTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCCCTAACTCTC
AS_European_sdY	CCCTCTCTCCCCA-----
AS_Tasmanian_Ssa06_sdY	CCCTCTCTCCCC-----CCCTCTCTCTCTCTCTCTCTCTCCCTAACTCTC
Chinook_sdY	-----
RT_sdY	-----
BT_sdY	-----CCCTCTCTCTCTCTCTCTATTTCTCTGTCTCTCCCTAACTCTCTC
AS_Tasmanian_Ssa02_sdY	TCTCTCCCTCTCTCTCTCTCTCTTTTCTCTCTCTCTCTCTCTCTCCCTCTCTCTCTC
AS_Tasmanian_Ssa03_sdY	TCTCTCCCTCTCTCTCTCTCTCTTTTCTCTCTCTCTCTCTCTCTCCCTCTCTCTCTC
AS_European_sdY	-----CTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCCCTAACTCTCTC
AS_Tasmanian_Ssa06_sdY	TCTC-CCCTCTCTCTCTCTCTTTTCTCTCTCTCTCTCTCTCTCTCCCTCTCTCTC
Chinook_sdY	-----
RT_sdY	-----
BT_sdY	TCTCCCTCTCTCTCTCT-----CTCCC
AS_Tasmanian_Ssa02_sdY	TCTCTCTCTCTCTCTCTCTCTCTATCACTCTCCCTCTCTCTCTCTCTCTCTCCC
AS_Tasmanian_Ssa03_sdY	TCTCTCTCTCTCTCTCTCTCTCTATCACTCTCCCTCTCTCTCTCTCTCTCTCCC
AS_European_sdY	TCTCCCTCTCTCTCTCT-----
AS_Tasmanian_Ssa06_sdY	TCTCTCTCTCTCTCTCT-----CTCTCACTCTCCCTCTCTCTCTCTC
Chinook_sdY	-----
RT_sdY	-----
BT_sdY	TCTCTCTCTCTCTCTCTCCCTCCCTCTCTCTCTCTCTTTTCTCTCTCTCTCTCTC
AS_Tasmanian_Ssa02_sdY	TCCCT--CTC
AS_Tasmanian_Ssa03_sdY	TCCCTC
AS_European_sdY	-----CTCTCTCTCTCTCTCTCTCTCTCTC
AS_Tasmanian_Ssa06_sdY	TCCCTCCCTC
Chinook_sdY	-----CTCCCTCTA-----
RT_sdY	-----CTCCCTCTATCTCTGTCTC

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BT_sdY          TCCTCCCTCTCTTTCTATGTC CCTCTGTCACTCTCTCTCTCCCCAG | ----
AS_Tasmanian_Ssa02_sdY  TCCTCCCTCTCTTTCTATGTC CCTCTGTCACTCTCTCTCTCCCCAG | CCCA
AS_Tasmanian_Ssa03_sdY  TCCTCCCTCTCTTTCTATGTC CCTCTGTCACTCTCTCTCTCCCCAG | CCCA
AS_European_sdY        TCCTCCCTCTCTTTCTATGTC CCTCTGTCACTCTCTCTCTCTCCCCAG | CCCA
AS_Tasmanian_Ssa06_sdY  TCCTCCCTCTCTTTCTATGTC CCTCTGTCACTCTCTCTCTCTCCCCAG | CCCA
Chinook_sdY          -----TCTCTCCCCAG | CCCA
RT_sdY          TGTTCCCTCTGTT-----TCTCTCTCCCCAG | CCCA
                                     ***** | ****

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      exon2
--Exon 2F----->

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BT_sdY          GCACTCTTTTCTTGTCTCAGTGGAGTACTGCCAAGAGGAGGTGCTTAGTC
AS_Tasmanian_Ssa02_sdY  GCACTCTTTTCTTGTCTCAGTGGAGTACTGCCAAGAGGAGGTGCTTAGTC
AS_Tasmanian_Ssa03_sdY  GCACTCTTTTCTTGTCTCAGTGGAGTACTGCCAAGAGGAGGTGCTTAGTC
AS_European_sdY        GCACTCTTTTCTTGTCTCAGTGGAGTACTGCCAAGAGGAGGTGCTTAGTC
AS_Tasmanian_Ssa06_sdY  GCACTCTTTTCTTGTCTCAGTGGAGTACTGCCAAGAGGAGGTGCTTAGTC
Chinook_sdY          GCACTGTTTTTCTTGTCTCAGTGGAGTACTGCCAAGAGGAGGTGCTTAGTC
RT_sdY          GCACTGTTTTTCTTGTCTCAGTGGAGTACTGCCAAGAGGAGGTGCTTAGTC
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      exon2
<-----Exon 1R-

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BT_sdY          ATGAGGTTATGGGGAGTGATGTCAGAATTGCCTACAAGCCCTTCTCCCTG
AS_Tasmanian_Ssa02_sdY  ATGAGGTTATGGGGAGTGATGTCAGAATTGCCTACAAGCCCTTCTCCCTG
AS_Tasmanian_Ssa03_sdY  ATGAGGTTATGGGGAGTGATGTCAGAATTGCCTACAAGCCCTTCTCCCTG
AS_European_sdY        ATGAGGTTATGGGGAGTGATGTCAGAATTGCCTACAAGCCCTTCTCCCTG
AS_Tasmanian_Ssa06_sdY  ATGAGGTTATGGGGAGTGATGTCAGAATTGCCTACAAGCCCTTCTCCCTG
Chinook_sdY          ATGAGGTCATGGGGGGTGATGTCAGAATTGCCACAAGAC---CTCCCTA
RT_sdY          ATGAGGTCATGGGGGGTGATGTCAGAATTGCCACAAGAC---CTCCCTA
*****

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exon2

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BT_sdY	ATGATGGATGGGATCCCCGTCATCTCTCTCCCAAAGCCCCCGACACCAT
AS_Tasmanian_Ssa02_sdY	ATGATGGATGGCATCCCCGTCATCTCTCTCCCAAAGCCCCCGACACCAT
AS_Tasmanian_Ssa03_sdY	ATGATGGATGGCATCCCCGTCATCTCTCTCCCAAAGCCCCCGACACCAT
AS_European_sdY	ATGATGGATGGGATCCCCGTCATCTCTCTCCCAAAGCCCCCGACACCAT
AS_Tasmanian_Ssa06_sdY	ATGATGGATGGGATCCCCGTCATCTCTCTCCCAAAGCCCCCGACACCAT
Chinook_sdY	ATGATGGATGGGATCCCCTTCATTTCTCTCCCAAAGCCCCCAACACCCT
RT_sdY	ATGATGGATGGGATCCCCTTCATCTCTCTCCCAAAGCCCCCAACACCCT
	***** ** * ***** ** * *

exon2

BT_sdY	TCCCATCTCCTCTGACCGTTCAACCCTCTCCAACCTGCTTTCCTCATGG
AS_Tasmanian_Ssa02_sdY	TCCCATCTCCTCTGACCGTTCAATCCTCTCCAACCTGCTTTCCTCATGG
AS_Tasmanian_Ssa03_sdY	TCCCATCTCCTCTGACCGTTCAATCCTCTCCAACCTGCTTTCCTCATGG
AS_European_sdY	TCCCATCTCCTCTGACCGTTCAATCCTCTCCAACCTGCTTTCCTCATGG
AS_Tasmanian_Ssa06_sdY	TCCCATCTCCTCTGACCGTTCAATCCTCTCCAACCTGCTTTCCTCATGG
Chinook_sdY	TCCTATCTCCTCTGATCGTTCAATCCTCTCCAACCTGTTGTCCCTCATGG
RT_sdY	TCCTATCTCCTCTGATCGTTCAATCCTCTCCAACCTGTTGTCCCTCATGG
	*** ***** ** * ***** ** * *

exon2

BT_sdY	AGGGTGGAGTGGTTTTAAGCTCTAGGGAGGAAGGCATCTATGCTGAACGG
AS_Tasmanian_Ssa02_sdY	AGGGTGGAGTGGTTTTAAGCTCTAAGGAGGAAGGCATCTATGCTGAACGG
AS_Tasmanian_Ssa03_sdY	AGGGTGGAGTGGTTTTAAGCTCTAAGGAGGAAGGCATCTATGCTGAACGG
AS_European_sdY	AGGGTGGAGTGGTTTTAAGCTCTAAGGAGGAAGGCATCTATGCTGAACGG
AS_Tasmanian_Ssa06_sdY	AGGGTGGAGTGGTTTTAAGCTCTAAGGAGGAAGGCATCTATGCTGAACGG
Chinook_sdY	AGGGTGGAGTAGTTTTAAGCTCTAGGGAGGAAGGTATCTATGCTGAACGG
RT_sdY	AGGGTGGAGTGGTTTTAAGCTCTAGGGAGGAAGGTATCTATGCTGAACGG
	***** ***** ***** ***** *****

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exon2
BT_sdY      CATAGCCAAGCCATAGTCTCCTGGATGGGCGGCACGGGGGATGAGATGCA
AS_Tasmanian_Ssa02_sdY  CATAGCCAAGCCATAGTCTCCTGGATGGGCGGCACGGGGGATGAGATGCA
AS_Tasmanian_Ssa03_sdY  CATAGCCAAGCCATAGTCTCCTGGATGGGCGGCACGGGGGATGAGATGCA
AS_European_sdY        CATAGCCAAGCCATAGTCTCCTGGATGGGCGGCACGGGGGATGAGATGCA
AS_Tasmanian_Ssa06_sdY  CATAGCCAAGCCATAGTCTCCTGGATGGGCGGCACGGGGGATGAGATGCA
Chinook_sdY           CATAGCCAAGCCACAGTCTCCTGGATGGGTGGCACC GGAGATGAGATGCA
RT_sdY              CATAGCCAAGCCACAGTCTCCTGGATGGGTGGCACC GGAGATGAGATGCA
***** ** *****

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exon2
<--Exon 2R-
BT_sdY      CGTGATGGAGCGTGATGTGGATCCTGTGATGCTCTTCAACAGGGAGACCT
AS_Tasmanian_Ssa02_sdY  CGTGATGGAGCGTGATGTGGATCCTGTGATGCTCTTCAACAGGGAGACCT
AS_Tasmanian_Ssa03_sdY  CGTGATGGAGCGTGATGTGGATCCTGTGATGCTCTTCAACAGGGAGACCT
AS_European_sdY        CGTGATGGAGCGTGATGTGGATCCTGTGATGCTCTTCAACAGGGAGACCT
AS_Tasmanian_Ssa06_sdY  CGTGATGGAGCGTGATGTGGATCCTGTGATGCTCTTCAACAGGGAGACCT
Chinook_sdY           CGTGATGGACCGTGATGTGGACCCTGTGATGCTCTTCAACAGAGAGACCT
RT_sdY              CGTGATGGAGCGTGATGTGGACCCTGTGATGCTCTTCAACAGAGAGCACT
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-----|
BT_sdY      TCAGACAGG | GTGAGTGA -----
AS_Tasmanian_Ssa02_sdY  TCAGACAGG | GTGAGTGA -----
AS_Tasmanian_Ssa03_sdY  TCAGACAGG | GTGAGTGA -----
AS_European_sdY        TCAGACAGG | GTGAGTGA -----
AS_Tasmanian_Ssa06_sdY  TCAGACAGG | GTGAGTGA -----
Chinook_sdY           TCAGACAGG | GTGAGTGAACCTGTTAGTGGTAAATTCTAATGATTCTTGAA
RT_sdY              TCAGACAGG | GTGAGTGAATCTGTTAGTGGTAAATTCTAATGATTCTTGAA
***** | *****

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BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GAGCATAACTTATAATAGGGAGGATGTTCCCTCGGGGGGATCAAATCAGC  
RT\_sdY GAGCATAACTTATAATAG-----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GGGTAGTCAGCGGATATTTTAGAGCGTCACTGATCGTTTTTCGATAAAAT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TCAAACCTTTCATTAAAACACACATGCAAGGTATTGAATTAAAGCTACACT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY CGTTGTGAATCTAGTCAGATTTGTAAAATGCTTTTCGGCGAAAGCATGAG  
RT\_sdY -----



BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY AAGCTATTATCTGATAGCATGTAACACCCCAAAGACCCGTAGAGGATGT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY AAACAAAATAATTAGCGTAGTCGGCGCTACACAAACCGCACAATAAAAT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY ATAAAACATTCATTACCTTTGACCATCTTCTTTCTTGGCACTCCTTGATG  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TCCCATAATCAATACTGGGTCTTTTTTTGGATTAAATCGGTCCATATATA  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GCCTAGATATCGATCTATGAAGACTGTGTGATAAACGGAAAAAATAGCG  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TTTCATAACGTAACGTCATTTTTTAAAAGTTAAAAGTCGACGATAAACT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TTCACAAAACACTTCGAAATACCTTTCTAATGCAACTTTAGGTATTACTA  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY CACGTTAATAAGCTATAAAAATCATCAGGAGGCGATGTAAATTCGATAGT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TGGCGTGTGGAAAAAATGTCCGGAAAAACACAGAGACAATGCCTCAGGTC  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GGTGGTTCGGAGGGAATCGGTTCCCTTTGGTCGGATCTACCAAGAATCAA  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TCAGAATCAAATGAGGAGACTCTATACATCCTGTGGAAGCTGTAGGTACT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GCAAGCTCGGCCTCATTTAATACGGTTACCTTTAACAATTCATGGAAGT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GGCGCATGGATATTTTTTTTCCATCTCCAGTKATCAGATTTTCCTGCGCTT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TTCGATGAAACAGACGTTCTGTTATAGTCACAGCCGTGATTTAAACAGTT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TTAGAAACGTCTGAGTGTTTTCTATCCACACATACTAATCATATGCATAT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY ACTATATTCCTGGAATGAGTAGCAGGGCGCTGAAATGTTGCGCGATTTTT  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY AACAAAAAGCTGCGAAAATTCGCAGCCTCCCCAAGAGGTTTTAATTAAAC  
RT\_sdY -----TAAAC

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY AACCCAAAATATAAGCTTATTTAAATCCTATGTTTGTGAACTTTGTAAT  
RT\_sdY AACCCAAAATATAAGCTTGTTTAAATCCTATGTTTGTGAACTTTGTAAT

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GTAAACAAACACTATATAGCCTTAAAAATGTTACTTATGTGATAATGCCT  
RT\_sdY GTAAACAAACACTATATAGCCTTAAAAATGTTACTTATGTGATAATGCCT

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GAAAAAATGGTGTGGAGGGTATATTGGCACAGTGTGTTAGGCCTATA  
RT\_sdY GAAAAACAGTGTGGAGGGTATATTGGCGCAGTGTGTTAGGCCAATA

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BT_sdY -----TA
AS_Tasmanian_Ssa02_sdY -----TA
AS_Tasmanian_Ssa03_sdY -----TA
AS_European_sdY -----TA
AS_Tasmanian_Ssa06_sdY -----TA
Chinook_sdY ATTTTGATAAATCTATTCATACTATTTTCATCCTTCTATTTTCATCCTTCTA
RT_sdY ATTTTGATAAATGTATTCATAC-----TA

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BT_sdY TG-----
AS_Tasmanian_Ssa02_sdY TT-----
AS_Tasmanian_Ssa03_sdY TT-----
AS_European_sdY TT-----
AS_Tasmanian_Ssa06_sdY TT-----
Chinook_sdY TTTTCATCCTTCCACAAGATATAGTCCCGACACAACCATATGGTTGCTACC
RT_sdY TTTTCATCCTTCCACAAGATATAGTCCCGACACAACCATATGGTTGCTACC

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BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY CAAACTGGATGGTCATCCATTGGTTTTGGTTGCCAAAGACACAACCCAGT
RT_sdY CAAACTGGATGGTCATCCATTGG-TTTGGTTGCCAAAGACGCTACCCAGT

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BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY TGTTTCAGATTTTTTGTCTGTATCTATGGACACGACCTGGTTGTTTCATTT
RT_sdY TGTTTCAGATTTTTTGTCTGTAACTATGGACACGACCCGGTTGTTTCATTT

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BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TAAATGTTCCATTGCCATTCTGGCTGGCAACATTCTTATCCTTTGCTTGC  
RT\_sdY TAAATGTTCCATTGCCATTCTGGCTGGCAACATTCTTATCCTTG-TTGC

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TAGCTAGCCAACACTGCGGCTAACTTACAGTTACGTCAAACAGTGCAGTCAG  
RT\_sdY TAGCTAGTCAACTATGGCTAACTTACAGTTACGTCAAACAGTGCAGTGAG

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY CAACAAAGTATATTGCATTTGCATTTGTTTAAGATGTTTTCTAATGACAT  
RT\_sdY CACAAGTATATGCATTTGCATTGTTAG-----ACTTTTCTAAT

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY TTATTTGGATATAACAATGACTTACACAGTTTGGCCTGCCATAGAAAATG  
RT\_sdY TACATTTATTGGATGTAACATGACTCATGGTTGGCCTGCCATAGAAAATG

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BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY TTCTCTCTCATCAGGACACTGTTTACAGAGGAG-----CAACAACACAGC
RT_sdY TTCTCTCTCGTCAGGACACTGTTTACAGAGGAGCTAGTCAACAATACAGC

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BT_sdY -----AAGGGAATCTG-----
AS_Tasmanian_Ssa02_sdY -----AAGGGAATCTG-----
AS_Tasmanian_Ssa03_sdY -----AAGGGAATCTG-----
AS_European_sdY -----AAGGGAATCTG-----
AS_Tasmanian_Ssa06_sdY -----AAGGGAATCTG-----
Chinook_sdY TAACACAATCACTTCAAACGGAAGCTGAAAAGACTGAAAAGCTGGCTGCAC
RT_sdY TAACACAATCACTTCAAACGGAAGCTGGAAAGACTCAAAAAGCTGGCTGCAC
          ** ***** **

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BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY TTTGTTTCCTTTTACCTGTTTTTTATTGATATTTTTTGTATATACAGTAT
RT_sdY TTTGTTTCCTTTTACCTGTTTTTTATTGATATTTTTTGTATATAGAGTAT

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BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY CCATAAAAATTATGCTGATTCATGATTTTGGCTGGCTGAGAAAAGCTGCC
RT_sdY CCATAAAAATTATGCTGATTCGTGATTTTGGCTGGCTGAGAAAAGCTGCC

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BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY AGCCTATCTGTCTCTTCCCGACTCCCGACACATTCGTTACTATGGGACAG  
RT\_sdY TGCCTATCTGTCTCTTCCCGACTCCCGACACATTCGTTACTATGGGACAG

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY CTGGAGAAATAATTTGAATTTTGAACAATGTTGCAATATATCAGAGAGA  
RT\_sdY CTAGAGAAATAATTTGAATTTTGAACAATGTTCCAATATATCAGAGAGA

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY CAGATAGTAAGGGTTATACAAATCTCCGCTGTTTAAACTAAATGTTAGT  
RT\_sdY CAGATAGTAAGGTTTATACAAATCTCCGCTGTTTAAACTAAA-----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY CTAAATGGAATGTGAGATAATGTCTAGATGCTTTTAAATATTGGAGGTCAA  
RT\_sdY -----

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY GTTTATACATTGCCTGGCTGGGCTGATGAGACAGTGGATTGTGCTGTCAG  
RT\_sdY -TTTATACATTGCCTGGCTGGGCTGATGAGACAGTGGATTGTGCTGTCAG

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY ATGGAACAGAGTAAATAGGCATTTTAAACAACATAGATTTAGCTGGTAGTA  
RT\_sdY ATGGAGCAGAGTAAATAGGCATTTTACATAGATAGATTTAGCTGGTAGTA

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY ACTTGTTGGAATAGATACTGGCTTGAATGCATTTTTTAACCAATCAGCATTC  
RT\_sdY ACTTGTTGGAATAGATACTGGCTTGAATGCATTTTTTAACCCATCAGCATTC

BT\_sdY -----  
AS\_Tasmanian\_Ssa02\_sdY -----  
AS\_Tasmanian\_Ssa03\_sdY -----  
AS\_European\_sdY -----  
AS\_Tasmanian\_Ssa06\_sdY -----  
Chinook\_sdY ATGATTACACACACACGTTGTATAAAACGTATATTGCCAACGATAATGTT  
RT\_sdY ATGATTACACCCACACGTTGTATAAAACGTATATTGCCAACTATAATGTT

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BT_sdY          -----TTACGGGTAAT-----TCACAACAGATTCCACGAAACACTAATTG
AS_Tasmanian_Ssa02_sdY  -----TTACGGGTAAT-----TCACAACAGATTTTCACGAAACACTAATTG
AS_Tasmanian_Ssa03_sdY  -----TTACGGGTAAT-----TCACAACAGATTTTCACGAAACACTAATTG
AS_European_sdY        -----TTACGGGTAAT-----TCACAACAGATTTTCACGAAACACTAATTG
AS_Tasmanian_Ssa06_sdY  -----TTACGGGTAAT-----TCACAACAGATTTTCACGAAACACTAATTG
Chinook_sdY          GATATTATGGTTAGTCAGTCCTCACAAACAGTTTTCACAAAACACTAAGTG
RT_sdY            GATATTATGGTTAGTCAGTCCTCACAAACAGTTTTCACAAAACACTAAGTG
                  *** ** * * *          ***** ** ** ***** **

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BT_sdY          TGTGCCCTCAGGCCCTACTCCGCTACCACGTAACTACAACACAAAATCA
AS_Tasmanian_Ssa02_sdY  TGTGCCCTCAGACCCTTACTCCGCTACCACGTAACTACAACACAAAATCA
AS_Tasmanian_Ssa03_sdY  TGTGCCCTCAGACCCTTACTCCGCTACCACGTAACTACAACACAAAATCA
AS_European_sdY        TGTGCCCTCAGACCCTTACTCCGCTACCACGTAACTACAACACAAAATCA
AS_Tasmanian_Ssa06_sdY  TGTGCCCTCAGACCCTTACTCCGCTACCACGTAACTACAACACAAAATCA
Chinook_sdY          TGTGCCCTCAGACCCTACTCCACTACCCTATATCTACAACACAAAATSC
RT_sdY            TGTGCCCTCAGACCCTACTCCACTACCCTATATCTACAACACAAAATCC
                  ***** ** * ***** ***** ** *****

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BT_sdY          ATGTGTAAATTTTTGTATTGTGCGTATGTTATCTTGTGTGTGTATGCGTG
AS_Tasmanian_Ssa02_sdY  ATGTGTACATTTTTGTATTGTGCGTATGTTATCTTGTGTGTGTATGCATG
AS_Tasmanian_Ssa03_sdY  ATGTGTACATTTTTGTATTGTGCGTATGTTATCTTGTGTGTGTATGCATG
AS_European_sdY        ATGTGTACATTTTTGTATTGTGCGTATGTTATCTTGTGTGTGTATGCATG
AS_Tasmanian_Ssa06_sdY  ATGTGTACATTTTTGTATTGTGCGTATGTTATCTTGTGTGTGTATGCATG
Chinook_sdY          ATGTGTACGTGTGTGTATTGTGAGTATGTTATCGTGTGCGTTTATGCATG
RT_sdY            ATGTGTACGTGTGTGTATTGTGAGTATGTTATTGTGTGCGTTTATGCATG
                  ***** * * ***** ***** ***** ** ***** **

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BT_sdY          TGTCGGTGCCTATGATTGTGTTGCTTCACAGACCCCGCTGTTCCATAATG
AS_Tasmanian_Ssa02_sdY  TGTCGGTGCCTATGATTGTGTTGCTTCACAGACCCCGCTGTTCCATAATG
AS_Tasmanian_Ssa03_sdY  TGTCGGTGCCTATGATTGTGTTGCTTCACAGACCCCGCTGTTCCATAATG
AS_European_sdY      TGTCGGTGCCTATGATTGTGTTGCTTCACAGACCCCGCTGTTCCATAATG
AS_Tasmanian_Ssa06_sdY  TGTCGGTGCCTATGATTGTGTTGCTTCACAGACCCCGCTGTTCCATAATG
Chinook_sdY        TGTCAGTGCCTATSTTTGTGTTGCTTCACAGTCCCGCTGTTCCATAAGG
RT_sdY          TGTCAGTACCTATGTTTGTGTTGCTTCACAGTCCCGCTGTTCCATAAGG
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BT_sdY          TGTATTTTT-----ATCTGATTTTATTGA-TGCATCA
AS_Tasmanian_Ssa02_sdY  TGTATTTTT-----ATCTGATTTTATTGC-TGCATCA
AS_Tasmanian_Ssa03_sdY  TGTATTTTT-----ATCTGATTTTATTGC-TGCATCA
AS_European_sdY      TGTATTTTT-----ATCTGATTTTATTGC-TGCATCA
AS_Tasmanian_Ssa06_sdY  TGTATTTTT-----ATCTGATTTTATTGC-TGCATCA
Chinook_sdY        TGTATTTTTTAAATCTTTTTTTTT---ATCTGATTCT--TGCATTTATCA
RT_sdY          TGTATTTTTTTATCTGTTTTTTTTTAAATCTGATTCTACTGCTTGCATCA
*****          *****  *  **  *  ****

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BT_sdY          GTTACC-----TGATGTGGAATAGTGTCCATGTAGTCATGGCTCTAT
AS_Tasmanian_Ssa02_sdY  GTTACC-----TGATGTGGAATAGAGTTCCATGTAGTCATGGCTCTAT
AS_Tasmanian_Ssa03_sdY  GTTACC-----TGATGTGGAATAGAGTCCCATGTAGTCATGGCTCTGT
AS_European_sdY      GTTACC-----TGATGTGGAATAGAGTTCCATGTAGTCATGGCTCTAT
AS_Tasmanian_Ssa06_sdY  GTTACC-----TGATGTGGAATAGAGTTCCATGTAGTCATGGCTCTAT
Chinook_sdY        TTTACCACACATTTTATGTGGAATAGAGTTCCATGTAGTCATGGCTCTAT
RT_sdY          TTTACC-----TGATGTGGAATAAAGTTCCATGTAGCCATGGCTCTAT
*****          *  *****  **  *****  *****  *

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BT_sdY          GTAGTACTGTGCTCCTCCCATAG-----TCTGTTCTGGACTTGGGGACTG
AS_Tasmanian_Ssa02_sdY  ATAGTACTGTGCTCCTCCCATAA-----TCTGTTCTGGACTTGGAGGACTG
AS_Tasmanian_Ssa03_sdY  ATAGTACTGTGCTCCTCCCATAA-----TCTGTTCTGGACTTGGAGGACTG
AS_European_sdY        ATAGTACTGTGCTCCTCCCATAA-----TCTGTTCTGGACTTGGAGGACTG
AS_Tasmanian_Ssa06_sdY  ATAGTACTGTGCTCCTCCCATAA-----TCTGTTCTGGACTTGGAGGACTG
Chinook_sdY          GTAGTAATGATTGCCTCTCATGGTCTGTTCTGTTCTGGACTTGGGGACTG
RT_sdY            GTAGTAATGATCGCCTCCCATGG-----TCTGTTCTGGACTTGGGGACTG
                ***** **      ***** ***      *****

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BT_sdY          TGAAGAGACCTCTGGTGACATGTCTTGTGGGGTATGGATGGGTGTCTGAG
AS_Tasmanian_Ssa02_sdY  TGAAGAGACCTCTGGTGGCATGTCTTGTGGGGTA-----
AS_Tasmanian_Ssa03_sdY  TGAAGAGACCTCTGGTGGCATGTCTTGTGGGGTA-----
AS_European_sdY        TGAAGAGACCTCTGGTGGCATGTCTTGTGGGGTA-----
AS_Tasmanian_Ssa06_sdY  TGAAGAGACCTCTGGTGGCATGTCTTGTGGGGTA-----
Chinook_sdY          TGAAGAGACCTCTGGTGGCATGTCTTGTGGGGTA-----
RT_sdY            TGAAGAGACCTCTGGTGGCATGTCTTGTGGGGTA-----
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BT_sdY          CTGTGAGCCAGTAGTTTAAACAGACCTCTGGTGGCATGTCTTGTGGGGTA
AS_Tasmanian_Ssa02_sdY  -----
AS_Tasmanian_Ssa03_sdY  -----
AS_European_sdY        -----
AS_Tasmanian_Ssa06_sdY  -----
Chinook_sdY          -----
RT_sdY            -----

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BT_sdY          TGGATGGGTGTCTGAGCTGTGAGCCAGTAGTTTAAACAGACCTCTGGTGA
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY    -----
RT_sdY         -----

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BT_sdY          CATGTCTTGTGGGGTATGGATGGGTGTCTGAGCTGTGTGCCAGTAGTTCA
AS_Tasmanian_Ssa02_sdY -----TGGGGTATGCATGGGTGTCCGAGCTGTGTGCCAGTAGTTCA
AS_Tasmanian_Ssa03_sdY -----TGGGGTATGCACGGGTGTCCGAGCTGTGTGCCAGTAGTTCA
AS_European_sdY -----TGGGGTATGCATGGGTGTCCGAGCTGTGTGCCAGTAGTTCA
AS_Tasmanian_Ssa06_sdY -----TGGGGTATGCGTGGGTGTCCGAGCTGTGTGCCAGTAGTTCA
Chinook_sdY    -----TGAGTTTTGCATGGGTGTCCACGCTGTGTGCCAGTTGTTCA
RT_sdY         -----TGAGTTTTGCAT--GTGTCCACGCTGTGTGCCAGTTGTTCA
                ** * * * *      * * * *      * * * * * * * * * * * * * * *

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BT_sdY          AACAGACAGTTCAGTACATTCAACATGTCAGTACATTTTACAAATACAAG
AS_Tasmanian_Ssa02_sdY AACAGACAATTCAGTACATTCAACATGTCAGTACATTTTACAAATACAAG
AS_Tasmanian_Ssa03_sdY AACAGACAATTCAGTACATTCAACATGTCAGTACATTTTACAAATACAAG
AS_European_sdY    AACAGACAATTCAGTACATTCAACATGTCAGTACATTTTACAAATACAAG
AS_Tasmanian_Ssa06_sdY AACAGACAATTCAGTACATTCAACATGTCAGTACATTTTACAAATACAAG
Chinook_sdY    AACAGACAGCTTGGTACATTCAACATTTCAATACATTTTATAAATAAAAG
RT_sdY         AACAGACAGCTTGGTACATTCAACATTTCAATACATTTTATAAATAACAAG
                * * * * * * * * * * * * * * * * * * * * * * * * * *

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BT_sdY          TAGTGATGAAGTCAATCTCTCCTCCACTTTGAGCCATGAGAGATTTACAT
AS_Tasmanian_Ssa02_sdY TAGTGATGAAGTCAATCTCTCCTCCACTTTGAGCCATGAGAGATTTACAT
AS_Tasmanian_Ssa03_sdY TAGTGATGAAGTCAATCTCTCCTCCACTTTGAGCCATGAGAGATTTACAT
AS_European_sdY   TAGTGATGAAGTCAATCTCTCCTCCACTTTGAGCCATGAGAGATTTACAT
AS_Tasmanian_Ssa06_sdY TAGTGATGAAGTCAATCTCTCCTCCACTTTGAGCCATGAGAGATTTACAT
Chinook_sdY      TAGCGATGAAGTCAATCTCTCCTCTGCTTTGAGCCTGGAGAGATTGACAT
RT_sdY           TAGCAATGAAGTCAATCTCTCCTCTGCTTTGAGCCTGGAGAGATTGACAT
***            *****

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BT_sdY          GCATATTATTAATGTTAGCTCTCCATGTACATTTAAGGGCCAGCCGTGCT
AS_Tasmanian_Ssa02_sdY GCATATTATTAATGTTAGCTCTC--TCTACATTTAAGG----GCCGTGCT
AS_Tasmanian_Ssa03_sdY GCATATTATTAATGTTAGCTCTC--TCTACATTTAAGG----GCCGTGCT
AS_European_sdY   GCATATTATTAATGTTAGCTCTC--TCTACATTTAAGG----GCCGTGCT
AS_Tasmanian_Ssa06_sdY GCATATTATTAATGTTAGCTCTC--TCTACATTTAAGG----GCCGTGCT
Chinook_sdY      GCACAT-----ATATCAGCT-----GATGTAAGA-----AGGGCT
RT_sdY           GCATAT-----ATATCAGCT-----GATGTAAGA-----AGGGCT
*** **          ** * ****          ** ****          * ***

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BT_sdY          GCCCTGTTCTAGGCCAGTTGTTATTTTCCCAAGTCCCTCTTTGTGGAGAG
AS_Tasmanian_Ssa02_sdY GCCCTGTTCTAGGCCAGTTGTTATTTTCCCAAGTCCCTCTTTGTGGAGAG
AS_Tasmanian_Ssa03_sdY GCCCTGTTCTAGGCCAGTTGTTATTTTCCCAAGTCCCTCTTTGTGGAGAG
AS_European_sdY   GCCCTGTTCTAGGCCAGTTGTTATTTTCCCAAGTCCCTCTTTGTGGAGAG
AS_Tasmanian_Ssa06_sdY GCCCTGTTCTAGGCCAGTTGTTATTTTCCCAAGTCCCTCTTTGTGGAGAG
Chinook_sdY      ATATAAATATATTTGATTTGAAATTT-----G
RT_sdY           ATATAAATACATTTGATTTGAAATTT-----G
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BT_sdY          ATTGACATATTATTAATATTAGGTGACCCCTTTGTTATTGGTTCAATTAC
AS_Tasmanian_Ssa02_sdY  ATTGACATATTATTAT-----ATTTGTTTTTTGGTTCAATTAC
AS_Tasmanian_Ssa03_sdY  ATTGACATATTATTAT-----ATTTGTTTTTTGGTTCAATTAC
AS_European_sdY      ATTGACATATTATTAT-----ATTTGTTTTTTGGTTCAATTAC
AS_Tasmanian_Ssa06_sdY  ATTGACATATTATTAT-----ATTTGTTTTTTGGTTCAATTAC
Chinook_sdY        ATTAGCATATTATTATTATTTCGATGAACACTTTTGTATTGGTTCATTTAC
RT_sdY           ATTTGCATATTATTATTATTTCGATGAACACTTTTGTGTTGGTTCATTTAC
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BT_sdY          GGATAATAGCTTAAAGTCCATTTTTCACTAAGGGCTCGATTCAATTTGT-
AS_Tasmanian_Ssa02_sdY  GGATAATAGCTTAAAGTCCATTTTTCACTAAGGGCTCGATTCAATTTGT-
AS_Tasmanian_Ssa03_sdY  GGATAATAGCTTAAAGTCCATTTTTCACTAAGGGCTCGATTCAATTTGT-
AS_European_sdY      GGATAATAGCTTAAAGTCCATTTTTCACTAAGGGCTCGATTCAATTTGT-
AS_Tasmanian_Ssa06_sdY  GGATAATAGCTTAAAGTCCATTTTTCACTAAGGGCTCGATTCAATTTGT-
Chinook_sdY        AGATAATTGCTTAAATTCAATGTTTCACTAAGGGC-CGATTCAATCTGTA
RT_sdY           AGATAATTGCTTGAATTCAATGTTTCACTAAGGGCTCGATTCAATCTGTA
*****  ****  **  **  *  *****  *****  ***

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BT_sdY          -----AGTTCGGGGCTAATGCTGAATTACATTTAAAGGTAA-ATTCCG
AS_Tasmanian_Ssa02_sdY  -----AGTTCGGGGCTAATGCTGAATTACATTTAAAGGTAA-ATTCTG
AS_Tasmanian_Ssa03_sdY  -----AGTTCGGGGCTAATGCTGAATTACATTTAAAGGTAA-ATTCTG
AS_European_sdY      -----AGTTCGGGGCTAATGCTGAATTACATTTAAAGGTAA-ATTCTG
AS_Tasmanian_Ssa06_sdY  -----AGTTCGGGGCTAATGCTGAATTACATTTAAAGGTAA-ATTCTG
Chinook_sdY        TTGCGGAAGTTGAAGGCTAATGCTTGATTACATTTGAAGGTAA-TTTCCG
RT_sdY           TTGCGGAAGTTCAAGGCTAATGCTTGATTACATTTGAAGGTAAATTTTCCG
*****  *****  *****  *****  ***  *

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BT_sdY	ATTTAGCTGACATACTGTTTGCAGCATATACTGTAAATGCA-----ACA
AS_Tasmanian_Ssa02_sdY	ATTTAGCTGACATACTGTTTGCAGCGTATACTGTAAATGCA-----ACA
AS_Tasmanian_Ssa03_sdY	ATTTAGCTGACATACTGTTTGCAGCGTATACTGTAAATGCA-----ACA
AS_European_sdY	ATTTAGCTGACATACTGTTTGCAGCGTATACTGTAAATGCA-----ACA
AS_Tasmanian_Ssa06_sdY	ATTTAGCTGACATACTGTTTGCAGCGTATACTGTAAATGCA-----ACA
Chinook_sdY	ATTGAGCCGACATACTGTTTGCAGCATATAATGTAAATGCAGTCTCCACA
RT_sdY	ATTGAGCCGACATACTGTTTGCAGCATATACTGCAAATGCAGTCTCCACA
	*** ** * ***** ** ** * ***** **

BT_sdY	AAATGCAGGATCATTGCCTTAAATGTATATTGCGCATTAGAACTGCTTTG
AS_Tasmanian_Ssa02_sdY	AAATGCAGGATCATTGCC-----TTAGCACTGTTTTG
AS_Tasmanian_Ssa03_sdY	AAATGCAGGATCATTGCC-----TTAGCACTGTTTTG
AS_European_sdY	AAATGCAGGATCATTGCC-----TTAGCACTGTTTTG
AS_Tasmanian_Ssa06_sdY	AAATGCAGGATCATTGCC-----TTAGCACTGTTTTG
Chinook_sdY	AAATGCAGGAGCATTTCCTTAAATGTATTTTTGTCATTAGCACTGCATTG
RT_sdY	AAATGCAGGAGCATTTCCTTAAATGTATTTTTGTCATTAGCACTGCATTG
	***** ** ** * ***** **

BT_sdY	ATGTTAATGTGAGCATCCCTCTCTTGTCCCTACTGAATCTGGCTGATAATA
AS_Tasmanian_Ssa02_sdY	ATGTTAATGTGAGCATCCCTCTCTTGTCCCTACTGAATCAGGCTGATAATA
AS_Tasmanian_Ssa03_sdY	ATGTTAATGTGAGCATCCCTCTCTTGTCCCTACTGAATCTGGCTGATAATA
AS_European_sdY	ATGTTAATGTGAGCATCCCTCTCTTGTCCCTACTGAATCTGGCTGATAATA
AS_Tasmanian_Ssa06_sdY	ATGTTAATGTGAGCATCCCTCTCTTGTCCCTACTGAATCTGGCTGATAATA
Chinook_sdY	ATGTTATTGTGAGCATCACTCTCTTGTCCCTACTGAATTTGTCTGATTATA
RT_sdY	ATGTTAATGTGAGCATCACTCTCTCGTACTACTGAATTTGTCTGATTATA
	***** ***** ***** ** ***** * ***** **



exon3

---Exon 3R-----

BT_sdY	TC	ACTCAGTGCACCAATCTCTATATCG		GTACAGATTATTATTATTATATA
AS_Tasmanian_Ssa02_sdY	TC	ACTCAGTGCACCAATCTCTATATCG		GTACAGATTATTATTATTATATA
AS_Tasmanian_Ssa03_sdY	TC	ACTCAGTGCACCAATCTCTATATCG		GTACAGATTATTATTATTATATA
AS_European_sdY	TC	ACTCAGTGCACCAATCTCTATATCG		GTACAGATTATTATTATTATATA
AS_Tasmanian_Ssa06_sdY	TC	ACTCAGTGCACCAATCTCTATATCG		GTACAGATTATTATTATTATATA
Chinook_sdY	TC	ACTCAGTGCACCAAACCTTTATATCG		GTACAGATT----CTCTTAC---
RT_sdY	TC	ACTCAGTGCACCAATCTTTATATCG		GTACAGATT----CTCTTAC---
		***** ** *****		***** * **

BT_sdY	TAGATTATCTGGTGCCTTGAATACATTAACACAGCGCCGTCCTCAGAAAT
AS_Tasmanian_Ssa02_sdY	TAGATTATCTGGTGCCTTGAATACATTAACACAGTGCCGGCCTCAGAAAT
AS_Tasmanian_Ssa03_sdY	TAGATTATCTGGTGCCTTGAATACATTAACACAGTGCCGGCCTCAGAAAT
AS_European_sdY	TAGATTATCTGGTGCCTTGAATACATTAACACAGTGCCGGCCTCAGAAAT
AS_Tasmanian_Ssa06_sdY	TAGATTATCTGGTGCCTTGAATACATTAACACAGTGCCGGCCTCAGAAAT
Chinook_sdY	-----TCTGGGGCATTGTACACATTAACACAGGGCCGACGCTAGAAGG
RT_sdY	-----TCTGGGGCATTGTACACATTAACACAGGGCCGACGCTAGAAGG
	***** ** *** * ***** ***** * ****

<---AS&BT 10bo gap R--

BT_sdY	AACCATTGGGAAGGGCAATTGATTTCCATAGGCGGACATGTTTTTTTTTCA
AS_Tasmanian_Ssa02_sdY	AACCA--AGGAAGGGCAATTGATTTCCATAGGCGGACATGTTTTTTTTTCA
AS_Tasmanian_Ssa03_sdY	AACCATTGGGAAGGGCAATTGATTTCCATAGGCGGACATGTTTTTTTTTCA
AS_European_sdY	AACCATTGGGAAGGGCAATTGATTTCCATAGGCGGACATGTTTTTTTTTCA
AS_Tasmanian_Ssa06_sdY	AACCA--AGGAAGGGCAATTGATTTCCATAGGCGGACATGTTTTTTTTTCA
Chinook_sdY	AATCATTGAGAAGGGCAATTGATTTCCATAGG-----ATG-TTTTTTTTCA
RT_sdY	AATCATTGAGAAG-----GATTTCCATAGG-----ATG-TTTTTTTTCA
	** ** **** ***** ** *****

```

BT_sdY      TGGCTTTTATAGTAAAGACATGTCATTTATCTTAACAAATGTATTACCTT
AS_Tasmanian_Ssa02_sdY  TGGCTTTTATAGTAAAGACATGTCATTTATCTTAACAAATGTATTACCTT
AS_Tasmanian_Ssa03_sdY  TGGCTTTTATAGTAAAGACATGTCATTTATCTTAACAAATGTATTACCTT
AS_European_sdY      TGGCTTTTATAGTAAAGACATGTCATTTATCTTAACAAATGTATTACCTT
AS_Tasmanian_Ssa06_sdY  TGGGTTTTATAGTAAAGACATGTCATTTATCTTAACAAATGTATTACCTT
Chinook_sdY      TGGTTTTTATAGTAAAG--ATGTAATTTTATCTTTAAAAATATATTTCCCTT
RT_sdY      TGGTTTTTATAGTAAAG--ATGTAATTTTTCTTTAAAAATATATTCCTT
***  *****  *****  *****  *  *****  *****  *****

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-Exon 3-intron-end F2->

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BT_sdY      TTAATGTGGTATGAACACAACCAGTCATGATGTTTTTCATCTGATTGTCAA
AS_Tasmanian_Ssa02_sdY  TTAATGTGGTATGAACACAACCAGTCATGATGTTTTTCATCTGATTGTCAA
AS_Tasmanian_Ssa03_sdY  TTAATGTGGTATGAACACAACCAGTCATGATGTTTTTCATCTGATTGTCAA
AS_European_sdY      TTAATGTGGTATGAACACAACCAGTCATGATGTTTTTCATCTGATTGTCAA
AS_Tasmanian_Ssa06_sdY  TTAATGTGGTATGAACACAACCAGTCATGATGTTTTTCATCTGATTGTCAA
Chinook_sdY      TTAATGTGGCATGTACACAACCAGTCATGATGTTTTTCATCTGATTGTCAA
RT_sdY      TTAATGTGGCACGTACACAACCAGTCATGATGTTTTTCATCTGATTGTCAA
*****  *  *  *****

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```

BT_sdY      AC-----
AS_Tasmanian_Ssa02_sdY  ACGAATCTTTGTAAGTCGCTCTGGATAAGAGCGTCTGCTAAATGACTTAA
AS_Tasmanian_Ssa03_sdY  ACGAATCTTTGTAAGTCGCTCTGGATAAGAGCGTCTGCTAAATGACTTAA
AS_European_sdY      ACGAATCTTTGTAAGTCGCTCTGGATAAGAGCGTCTGCTAAATGACTTAA
AS_Tasmanian_Ssa06_sdY  ACGAATCTTTGTAAGTCGCTCTGGATAAGAGCGTCTGCTAAATGACTTAA
Chinook_sdY      AA-----
RT_sdY      AA-----
*

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```

BT_sdY -----GAATCACTTCAAAAAGTAGGTTACCTTTGCACGTT
AS_Tasmanian_Ssa02_sdY ATGTTAAATGTAAATGAATCACTTCAAAAAGTAGGTTACCTTCGCACGTT
AS_Tasmanian_Ssa03_sdY ATGTTAAATGTAAATGAATCACTTCAAAAAGTAGGTTACCTTCGCACGTT
AS_European_sdY ATGTTAAATGTAAATGAATCACTTCAAAAAGTAGGTTACCTTCGCACGTT
AS_Tasmanian_Ssa06_sdY ATGTTAAATGTAAATGAATCACTTCAAAAAGTAGGTTACCTTCGCACGTT
Chinook_sdY -----AAATAATTTCAAAAAGTATGTTACCTTCGCATGTT
RT_sdY -----AAATAATTTCAAAAAGTAGGTTACCTTCGCATGTT
*** * ***** ***** *** **

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```

BT_sdY CGTCCAAAATAATTCTAGCATCCGAAGACTGCACTGTGTACCCGCCAACT
AS_Tasmanian_Ssa02_sdY CGTCCAAAATAATTCTAGCATCCGAAGACTGCACTGTGTACCCGCCAACT
AS_Tasmanian_Ssa03_sdY CGTCCAAAATAATTCTAGCATCCGAAGACTGCACTGTGTACCCGCCAACT
AS_European_sdY CGTCCAAAATAATTCTAGCATCCGAAGACTGCACTGTGTACCCGCCAACT
AS_Tasmanian_Ssa06_sdY CGTCCAAAATAATTCTAGCATCCGAAGACTGCACTGTGTACCCGCCAACT
Chinook_sdY CATCCAAAATAATTCTAGCATTTGAACTGGGCACTGTGGACCTGCCAATT
RT_sdY CATCCAAAATAATTCTAGCATTTGAACTGGGCACTGTGGACCTGCCAATT
* ***** *** ***** *** **

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```

BT_sdY TTTGTTCAATTTGCAAGTGGT-----TGGAGAAAACATCAG
AS_Tasmanian_Ssa02_sdY TTTGTTCAATTTGCAAGTGGT-----TGGAGAAAACATCTG
AS_Tasmanian_Ssa03_sdY TTTGTTCAATTTGCAAGTGGT-----TGGAGAAAACATCAG
AS_European_sdY TTTGTTCAATTTGCAAGTGGT-----TGGAGAAAACATCAG
AS_Tasmanian_Ssa06_sdY TTTGTTCAATTTGCAAGTGGT-----TGGAGAAAACATCTG
Chinook_sdY TTCTTTCAATTTGCACGTGGTTGAACTATCTTACTGGAGAAAACATCAG
RT_sdY TTCTTTCAATTTGCAAGTGGCTGAACTATCTTACTGGAGAAAACATCAG
** ***** ** ***** *

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BT_sdY          AGTGAGCAAAACAGCGTCTTG-----
AS_Tasmanian_Ssa02_sdY  AGCGAGCAAAAGAGCGTCTTG-----
AS_Tasmanian_Ssa03_sdY  AGCGAGCAAAAGAGCGTCTTG-----
AS_European_sdY    AGCGAGCAAAAGAGCGTCTTG-----
AS_Tasmanian_Ssa06_sdY  AGCGAGCAAAAGAGCGTCTTG-----
Chinook_sdY       ATAGAGCAAAACAGTGCCTTACTATATGTAGCCCATGTTTCTGATGCTAT
RT_sdY           ATAGAGCAAAACAGTGCCTTACTATATGTAGCCCATGTTTCTGATGCTAT
*   *****   ** *   ***

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BT_sdY          -----GCTATTGTGGGCATGATAGCATC
AS_Tasmanian_Ssa02_sdY  -----GCTATTGTGGGCTAGACAGCATC
AS_Tasmanian_Ssa03_sdY  -----GCTATTGTGGGCTAGACAGCATC
AS_European_sdY    -----GCTATTGTGGGCTAGACAGCATC
AS_Tasmanian_Ssa06_sdY  -----GCTATTGTGGGCTAGACAGCATC
Chinook_sdY       TTGGCTAAAAATAGTATGACATGTCATACTATTGTGGGCCAGACAGCATC
RT_sdY           CTGGCTAAAAATAGTATGACATGTCATACTATTGTGGGCCAGACAGCATC
*   *****   **   *****

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```

BT_sdY          AGA-----CTAGATACAGCAAGA-----CGCTGTTTCGCTCACT
AS_Tasmanian_Ssa02_sdY  AGG-----CTACGTATAGTAAGA-----CGCTGTTTCGCTCACT
AS_Tasmanian_Ssa03_sdY  AGG-----CTACATATAGTAAGA-----CGCTGTTTCGCTCACC
AS_European_sdY    AGG-----CTACATATAGTAAGA-----CGCTGTTTCGCTCACT
AS_Tasmanian_Ssa06_sdY  AGG-----CTACATATAGTAAGA-----CGCTGTTTCGCTCACT
Chinook_sdY       AGACACATGGCCTACACACTCTGAGACAGAGGGGCGCTGTCTGGCTCACT
RT_sdY           AGACACATGGCCTACACACTCTGAGACAGAGGGGCGCTGTCTGGCTCACT
**               ***   *   ***   ***** *   *****

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```

BT_sdY          CGAATACTTTATCTGAGATTTACGTGCTTTTCTGTCGGCACGAGTCTCG-
AS_Tasmanian_Ssa02_sdY  CGAATACTTTATCTGAGATTTACGTGGTTTTCTGTCGGCACGAGTCTCGG
AS_Tasmanian_Ssa03_sdY  CGAATACTTTATCTGAGATTTACGTGGTTTTCTGTCGGCACGAGTCTCGG
AS_European_sdY        CGAATACTTTATCTGAGATTTACGTGGTTTTCTGTCGGCACGAGTCTCGG
AS_Tasmanian_Ssa06_sdY  CGAATACTTTATCTGAGATTTACGTGGTTTTCTGTCGGCACGAGTCTCGG
Chinook_sdY          CAGATGCTTTATCTGAGATTGATGTGTCTTTCT-----GTCTCGG
RT_sdY            CGGAAGCTTTATCTGAGATTGATGTGTCTTTCT-----GTCTCGG
*   *   *****   *   *   *   *   *   *   *   *   *

```

```

BT_sdY          -----
AS_Tasmanian_Ssa02_sdY  TCAAATTTAATTTGGAAGGGTAAGGACGTATGGTGGG-----G
AS_Tasmanian_Ssa03_sdY  TCAAATTTAATTTGGAAGGGTAAGGACGTATGGTGGG-----G
AS_European_sdY        TCAAATTTAATTTGGAAGGGTAAGGACGTATGGTGGG-----G
AS_Tasmanian_Ssa06_sdY  TCAAATTTAATTTGGAAGGGTAAGGACGTATGGTGGG-----G
Chinook_sdY          TCAAATTTAATTTGGA--GGTACG---GTGGGGTGGGCCCGCCAAAACCA
RT_sdY            TCAAATTTAATTTGGATGGGCAAG---GTGGGGTGGGCCACCCAAAACCA

```

```

BT_sdY          -----
AS_Tasmanian_Ssa02_sdY  CGGGCCCTGCATTAACACTACAACAGTTATGATAACATTATGTTTTCTCCA
AS_Tasmanian_Ssa03_sdY  CGGGCCCTGCATTAACACTACAACAGTTATGATAACATTATGTTTTCTCCA
AS_European_sdY        CGGGCCCTGCATTAACACTACAACAGTTATGATAACATTATGTTTTCTCCA
AS_Tasmanian_Ssa06_sdY  CGGGCCCTGCATTAACACTACAACAGTTATGATAACATTATGTTTTCTCCA
Chinook_sdY          CAGGGCCCTGCATTAACCTCAACAGTTATGATAACATTACATTTCTCTA
RT_sdY            CAGGGCCCTGCATTAACCTCAACAGTTATGATAACATTACATTTCTCTA

```

```

BT_sdY -----
AS_Tasmanian_Ssa02_sdY TTTTCCTGTAATTTTC-----
AS_Tasmanian_Ssa03_sdY TTTTCCTGTAATTTTC-----
AS_European_sdY TTTTCCTGTAATTTTC-----
AS_Tasmanian_Ssa06_sdY TTTTCCTGTAATTTTC-----
Chinook_sdY TATTACTGTAATTTTCCACCATACAGTGCATTTCGGAAAATATTCAGACCC
RT_sdY TATTACTGTAATTTTCCACCATACAGTGCATTTCGGAAAGTATTCAAACCC

```

```

BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----GTTACAGCCTCATTCTAAAATTGAT
AS_Tasmanian_Ssa03_sdY -----GTTACAGCCTTATTCTAAAATTGAT
AS_European_sdY -----GTTACAGCCTTATTCTAAAATTGAT
AS_Tasmanian_Ssa06_sdY -----GTTACAGCCTTATTCTAAAATTGAT
Chinook_sdY ATTCCCTTTTCCCACATTTTGTTATGCTACAGCCTTATTCTTATATTGAT
RT_sdY ATTCCCTTTTCCCACATTTTGTTATGCTACAGCCTTATTCTAATATTGAT

```

```

BT_sdY -----
AS_Tasmanian_Ssa02_sdY TAAATAAATGTTTTTCCTCATCAATCTACACACAATACCTTATAATGGTA
AS_Tasmanian_Ssa03_sdY TAAATAAATGTTTTTCCTCATCAATCTACACACAATACCTTATAATGGTA
AS_European_sdY TAAATAAATGTTTTTCCTCATCAATCTACACACAATACCTTATAATGGTA
AS_Tasmanian_Ssa06_sdY TAAATAAATGTTTTTCCTCATCAATCTACACACAATACCTTATAATGGTA
Chinook_sdY TAAAT---CGGTTTTTCCTCATCAATCTACACACAATACCCCATTAATGACA
RT_sdY TAAAT---CGTTTTTCCTCATCAATCTACACACAATACCCCATTAATGACA

```



```

BT_sdY -----
AS_Tasmanian_Ssa02_sdY TATATAACAGATTTAAAGATTTTTTACAAATGT-----ATAAAAAAAT
AS_Tasmanian_Ssa03_sdY TATATAACAGATTTAAAGATTTTTTACAAATGT-----ATAAAAAAAT
AS_European_sdY TATATAACAGATTTAAAGATTTTTTACAAATGT-----ATAAAAAAAT
AS_Tasmanian_Ssa06_sdY TATATAACAGATTTAAAGATTTTTTACAAATGT-----ATAAAAAAAT
Chinook_sdY -----AGGTGAAAACAGTTTTTAAGAAAGTTTTGCTGATTAAAAAAC
RT_sdY -----AGGTGAAAACAGTTTTTAAGAAAGTTTTGCTGATTAAAAAAC

```

```

BT_sdY -----
AS_Tasmanian_Ssa02_sdY GT-----TTATTTACATAAGTATTTAGACCCTTTGCTAT
AS_Tasmanian_Ssa03_sdY GT-----TTATTTACATAAGTATTTAGACCCTTTGCTAT
AS_European_sdY GT-----TTATTTACATAAGTATTTAGACCCTTTGCTAT
AS_Tasmanian_Ssa06_sdY GT-----TTATTTACATAAGTATTTAGACCCTTTGCTAT
Chinook_sdY ATCAACAACCTATATATCTTATTTACATAAGATTTTCAGACCCTTTGCTAT
RT_sdY ATCAACAACCTATACATCTTATTTACATAAGATTTTCAGACCCTTTGCTAT

```

```

BT_sdY -----
AS_Tasmanian_Ssa02_sdY GAAACTCGAAATTAAGCTCAGCTGCATCCGGTTTC--CATTGATAATATT
AS_Tasmanian_Ssa03_sdY GAAACTCGAAATTAAGCTCAGCTGCATCCGGTTTC--CATTGATAATATT
AS_European_sdY GAAACTCGAAATTAAGCTCAGCTGCATCCGGTTTC--CATTGATAATATT
AS_Tasmanian_Ssa06_sdY GAAACTCGAAATTAAGCTCAGCTGCATCCGGTTTC--CATTGATAATATT
Chinook_sdY GAGAATCAAAATTAATATCAGCAGAATCCGGTTTCTGCTTTGATAATATT
RT_sdY GAGAATCAAAATTAATCTCAGCAGAATCCGGTTTC--CATTGATAATATT

```

---Exon 3-4

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY TGAGATGTTTCTACAACCTTGATTGGAGTCCACCTCTGGTAAATTCAATTT
AS_Tasmanian_Ssa03_sdY TGAGATGTTTCTACAACCTTGATTGGAGTCCACCTCTGGTAAATTCAATTT
AS_European_sdY TGAGATGTTTCTACAACCTTGATTGGAGTCCACCTCTGGTAAATTCAATTT
AS_Tasmanian_Ssa06_sdY TGAGATGTTTCTACAACCTTGATTGGAGTCCACCTCTGGTAAATTCAATTT
Chinook_sdY TTAGATGTTTCTACAACCTTGAGTGGAGTCCACCTGTGGTGGATTCAATTC
RT_sdY TTAGATGTTTCTACAACCTTGAGTGGAGTCCACCTGTGGTAGATTAAATTC
```

F2a----->

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY A-TGGGACATGATTTGGAAAGGCACACTCCTGTCTATATAAGGTCCCACA
AS_Tasmanian_Ssa03_sdY A-TGGGACATGATTTGGAAAGGCACACTCCTGTCTATATAAGGTCCCACA
AS_European_sdY A-TGGGACATGATTTGGAAAGGCACACTCCTGTCTATATAAGGTCCCACA
AS_Tasmanian_Ssa06_sdY A-TGGGACATGATTTGGAAAGGCACACTCCTGTCTATATAAGGTCCCACA
Chinook_sdY ATTGGGGCATGATATTGAAAGGCACACACCTGTCTATAACAAGGTCCCACA
RT_sdY ATTGGGGCATGATATTGAAAGGCACACACCTGTCTATAACAAGGTCCCACA
```

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY GTTGACAGTGCATTTTCAGAGCAAAAACCAAGTCATGAGGGCAAAGGAATT
AS_Tasmanian_Ssa03_sdY GTTGACAGTGCATTTTCAGAGCAAAAACCAAGTCATGAGGGCAAAGGAATT
AS_European_sdY GTTGACAGTGCATTTTCAGAGCAAAAACCAAGTCATGAGGGCAAAGGAATT
AS_Tasmanian_Ssa06_sdY GTTGACAGTGCATTTTCAGAGCAAAAACCAAGTCATGAGGGCAAAGGAATT
Chinook_sdY GTTGACAGTGCATGTCAGGGCAAAAACAAAGCCATGAGATTGAAAGAATT
RT_sdY GTTGACAGTGCATGTCAGGGCAAAAACCAAGCCATGAGATTGAAAGAATT
```

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY ATCCGTAGGGCTCCAAAACAGGATTGTGTATAGGCACAGATCAGGGGAAG
AS_Tasmanian_Ssa03_sdY ATCCGTAGAGCTCCAAAACAGGATTGTGTATAGGCACAGATCAGGGGAAG
AS_European_sdY ATCCGTAGAGCTCCAAAACAGGATTGTGTATAGGCACAGATCAGGGGAAG
AS_Tasmanian_Ssa06_sdY ATCCGTAGAGCTCCAAAACAGGATTGTGTATAGGCACAGATCAGGGGAAG
Chinook_sdY ATCCG-----AAACAAGATTGTGTTGAGGCACAGATC-TGGGAAG
RT_sdY ATCCG-----AAACAAGATTGTGTTGAGGCACAGATC-TGGGAAG
```

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY GGTACCAAACATTTCTGAAGCATTGAAGGTCCCCAAGAACACAGTGGTC
AS_Tasmanian_Ssa03_sdY GGTACCAAACATTTCTGAAGCATTGAAGGTCCCCAAGAACACAGTGGTC
AS_European_sdY GGTACCAAACATTTCTGAAGCATTGAAGGTCCCCAAGAACACAGTGGTC
AS_Tasmanian_Ssa06_sdY GGTACCAAACATTTCTGAAGCATTGAAGGTCCCCAAGAACACAGTGGTC
Chinook_sdY GGTACCAAACATTTCTGAAGCATTGAAGGTCCCCAAGA--TCAGTGGTC
RT_sdY GGTACCAAACGTTTCTGAA-----CCCCAAGA--TCAATGGTC
```

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY TCCATCATTCTTAAATGGAAGAAGTCTGGAAACACCAAGATTCTTCCTAG
AS_Tasmanian_Ssa03_sdY TCCATCATTCTTAAATGGAAGAAGTTTGGAAACACCAAGATTCTTCCTAG
AS_European_sdY TCCATCATTCTTAAATGGAAGAAGTTTGGAAACACCAAGATTCTTCCTAG
AS_Tasmanian_Ssa06_sdY TCCATCATTCTTAAATGGAAGAAGTTTGGAAACACCAAGATTCTTCCTAG
Chinook_sdY TCCATCATTCTGAAATGGAAGAAGTTTGGAAACCACCGAAACTCATCCTAG
RT_sdY TCCATCATTCTGAAATGGAAGAAGTTTGGAAACCCTGAAACTCATCCTAG
```

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY AGCTGGCCACCCG-----
AS_Tasmanian_Ssa03_sdY AGCTGGCCACCCG-----
AS_European_sdY AGCTGGCCACCCG-----
AS_Tasmanian_Ssa06_sdY AGCTGGCCACCCG-----
Chinook_sdY AGTTGGCCGCCAGAGCTGGACTCCTGAGTGGAGCAGTGGTCTAAGGCAC
RT_sdY AGTTGGCCGCCA-----GAGCAGCGGTCTAAGGCAC
```

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY TGCATCTTAGTGCTAGATTGGTCACTACAGTCCCGGTTTCGATCCCGGGC
RT_sdY TGCATCTCAGTGCTAGATTGGTCACTACAGTCCCGGTTTCGATCCCGGGC
```

```
BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY TGTATCACAACCGGTCGTGATTTGGAGTCCCATAGGGCGCCGTACAATTT
RT_sdY TGTATCACAACCGGTCGTGATTTGGAGTCCCATAGGGCGGCGTACAATTT
```

```

BT_sdY -----GCCAAACTGA
AS_Tasmanian_Ssa02_sdY -----GCCAACCTGA
AS_Tasmanian_Ssa03_sdY -----GCCAACCTGA
AS_European_sdY -----GCCAACCTGA
AS_Tasmanian_Ssa06_sdY -----GCCAACCTGA
Chinook_sdY GGCCCAGCGTCGTCCGGGTTAGGGGAGGCCGGGGAGGCCGTCATTGTAA
RT_sdY GGCCCAGCGTTGTCCGGGTTAGGGGAGGCCGGGGAGGCCGTCATTGTAA
* ** * *

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```

BT_sdY GCA-----
AS_Tasmanian_Ssa02_sdY GCA-----
AS_Tasmanian_Ssa03_sdY GCA-----
AS_European_sdY GCA-----
AS_Tasmanian_Ssa06_sdY GCA-----
Chinook_sdY GCAAGAATTTGTTTTTATATGACTTGCCTAGTTAAATAATGGTTAA--AT
RT_sdY ACAAGAATTTGTTTTTATATTACTTGCCTAGTTAAATAATGGCTAAATAT
**

```

```

BT_sdY -----ATCGGGGAGAAGGGCCTTGGTCATGGAGGTGAT
AS_Tasmanian_Ssa02_sdY -----ATCGGGGAGAAGGGCCTTGGTCAGGGAGGTGAT
AS_Tasmanian_Ssa03_sdY -----ATCGGGGAGAAGGGCCTTGGTCAGGGAGGTGAT
AS_European_sdY -----ATCGGGGAGAAGGGCCTTGGTCAGGGAGGTGAT
AS_Tasmanian_Ssa06_sdY -----ATCGGGGAGAAGGGCCTTGGTCAGGGAGGTGAT
Chinook_sdY ATATTTATTTTTTATTATCAGGGGAGAAGGGCCTTGGTCAGGGAGGTGAC
RT_sdY ATATTTATTTTTTATTATCAGGGGAGAAGGGCCTTGGTCAGGGAGGTGAC
*** *****

```

BT\_sdY CAAGAACCCGATTGTCAATCGGACAGAGCTCCAGAGTTCCTCTGTGGAGA  
AS\_Tasmanian\_Ssa02\_sdY CAAGAACCCGATTGTCAATCGGACAGAGCTCCAGAGTTCCTCTGTGGAGA  
AS\_Tasmanian\_Ssa03\_sdY CAAGAACCCGATTGTCAATCGGACAGAGCTCCAGAGTTCCTCTGTGGAGA  
AS\_European\_sdY CAAGAACCCGATTGTCAATCGGACAGAGCTCCAGAGTTCCTCTGTGGAGA  
AS\_Tasmanian\_Ssa06\_sdY CAAGAACCCGATTGTCAATCGGACAGAGCTCCAGAGTTCCTCTGTGGAGA  
Chinook\_sdY CAATAACCTGATGGTCACTCTGACATAGCTCCAAAGTTCCTCTGTGGAAA  
RT\_sdY CAATAACCTGATGGTC-CTCTGACATAGCTCCAAAGTTCCTCTGTGGAGA  
\*\*\* \*\*

BT\_sdY TGGGAGAACCTTCCAGAAGGACAACCATCTCTGCAGCACTCCACCAATCA  
AS\_Tasmanian\_Ssa02\_sdY TGGGAGAACCTTCCAGAAGGACAACCATCTCTGCAGCACTCCACCAATCA  
AS\_Tasmanian\_Ssa03\_sdY TGGGAGAACCTTCCAGAAGGACAACCATCTCTGCAGCACTCCACCAATCA  
AS\_European\_sdY TGGGAGAACCTTCCAGAAGGACAACCATCTCTGCAGCACTCCACCAATCA  
AS\_Tasmanian\_Ssa06\_sdY TGGGAGAACCTTCCAGAAGGACAACCATCTCTGCAGCACTCCACCAATCA  
Chinook\_sdY TGGGAGAATCTTCCAGAATGACAGCCATCTCTGCAACACTCCAATAATCA  
RT\_sdY TGGGAGAATCTTCCAGAATGACAGCCATCTCTGCAGCACTCCACTAATCA  
\*\*\*\*\* \*\*

BT\_sdY GGCCTTTATGGTAGAGTGTCCAGACGGAAGCCACTCCTCAGTAAAAGGCA  
AS\_Tasmanian\_Ssa02\_sdY GGCCTTCATGGTAGAGTGTCCAGACGGGAGCCACTCCTCAGTAAAAGGCA  
AS\_Tasmanian\_Ssa03\_sdY GGCCTTCATGGTAGAGTGTCCAGACGGGAGCCACTCCTCAGTAAAAGGCA  
AS\_European\_sdY GGCCTTCATGGTAGAGTGTCCAGACGGGAGCCACTCCTCAGTAAAAGGCA  
AS\_Tasmanian\_Ssa06\_sdY GGCCTTCATGGTAGAGTGTCCAGACGGGAGCCACTCCTCAGTAAAAGGCA  
Chinook\_sdY GGCCTTTATAGTAGAGTGGCCAGACGGAAGCCACTCCTCAGTAAAAGGCA  
RT\_sdY GGCCTTTTTTGGTAGAGTGGCCAGACGGAAGCCACTCCTCAGTAAAAGGCA  
\*\*\*\*\* \*

BT\_sdY CATGACAGCCCGCTTGTAGTTTGCCAAAAGGAACCTAAAGGACTCTCAGA  
AS\_Tasmanian\_Ssa02\_sdY CATGACAGCCCTCTTGTAGTTTGCCAAAAGGAACCTAAAGGACTCTCAGA  
AS\_Tasmanian\_Ssa03\_sdY CATGACAGCCCGCTTGTAGTTTGCCAAAAGGAATCTAAAGGACTCTCAGA  
AS\_European\_sdY CATGACAGCCCGCTTGTAGTTTGCCAAAAGGAACCTAAAGGACTCTCAGA  
AS\_Tasmanian\_Ssa06\_sdY CATGACAGCCCTCTTGTAGTTTGCCAAAAGGAACCTAAAGGACTCTCAGA  
Chinook\_sdY CATGACAGCCCCTTGGAGTTTGCCAAAAGGAACATAAAGCACTCTCAGA  
RT\_sdY CATGACAGCCCCTTGGAGTTTGCCAAAAGGAACATAAAGCACTCTCAGA  
\*\*\*\*\* \*\*

BT\_sdY CCATGAGAAACAAGATTCTCTTGTCTGAATAAACCAAGATTGAACACTTT  
AS\_Tasmanian\_Ssa02\_sdY CCATGAGAAACAAGATTCTCTTGTCTGAATAAACCAAGATTGAACACTTT  
AS\_Tasmanian\_Ssa03\_sdY CCATGAGAAACAAGATTCTCTTGTCTGAATAAACCAAGATTGAACACTTT  
AS\_European\_sdY CCATGAGAAACAAGATTCTCTTGTCTGAATAAACCAAGATTGAACACTTT  
AS\_Tasmanian\_Ssa06\_sdY CCATGAGAAACAAGATTCTCTTGTCTGAATAAACCAAGATTGAACACTTT  
Chinook\_sdY CCATGAGAAACAAGATTCTCTGCTCTGATTTAATCAAGATTTAACTCTAT  
RT\_sdY CCATGAGAAACAAGATTCTCTGCTCTGATTTAATCAAGATTTAACTCTAT  
\*\*\*\*\* \* \*\*

BT\_sdY GGCCT-GAATGCCAAGTGTACATCTGGAGGAAAGCTGGCACCATCCCTA  
AS\_Tasmanian\_Ssa02\_sdY GGCCT-GAATGCCAAGTGTACATCTGGAGGAAAGCTGGCACCATCCCTA  
AS\_Tasmanian\_Ssa03\_sdY GGCCT-GAATGCCAAGTGTACATCTGGAGGAAAGCTGGCACCATCCCTA  
AS\_European\_sdY GGCCT-GAATGCCAAGTGTACATCTGGAGGAAAGCTGGCACCATCCCTA  
AS\_Tasmanian\_Ssa06\_sdY GGCCT-GAATGCCAAGTGTACATCTGGAGGAAAGCTGGCACCATCCCTA  
Chinook\_sdY GGCCT-AAATTACAAGCGTACATCTGGTGGAAAGCTGGCACCATCCCTG  
RT\_sdY GGCCTAAAATTACAAGCGTACATCTGGTGGAAAGCTGGCACCATCCCTA  
\*\*\*\*\* \*\*

BT\_sdY CAGTGAAGCATGGTGGGAGCAGCATCATGCTGTGGGGATGTTTTTCAGCG  
AS\_Tasmanian\_Ssa02\_sdY CCGTGAAGCATGGTGGGGGCAGCATCATGCTGTGGGGATGTTTTTCAGCG  
AS\_Tasmanian\_Ssa03\_sdY CAGTGAAGCATGGTGGGGGCAGCATCATGCTGCGGGGATGTTTTTCAGCG  
AS\_European\_sdY CAGTGAAGCATGGTGGGGGCAGCATCATGCTGTGGGGATGTTTTTCAGCG  
AS\_Tasmanian\_Ssa06\_sdY CCGTGAAGCATGGTGGGGGCAGCATCATGCTGTGGGGATGTTTTTCAGCG  
Chinook\_sdY TGA-----  
RT\_sdY TGA-----

BT\_sdY GCAGGGACTGGGATCGAGGGAAAGATTAACAGAGCAAAGTACAGAGAGAT  
AS\_Tasmanian\_Ssa02\_sdY GCAGGGACTGGGATCGAGGGAAAGATTAACAGAGCAAAGTACAGAGAGAT  
AS\_Tasmanian\_Ssa03\_sdY GCAGGGACTGGGATCGAGGGAAAGATTAACAGAGCAAAGTACGGAGAGAT  
AS\_European\_sdY GCAGGGACTGGGATCGAGGGAAAGATTAACAGAGCAAAGTACAGAGAGAT  
AS\_Tasmanian\_Ssa06\_sdY GCAGGGACTGGGATCGAGGGAAAGATTAACAGAGCAAAGTACAGAGAGAT  
Chinook\_sdY -----  
RT\_sdY -----

BT\_sdY TCTTGATCCAGAGCGCTCAGGACCTCAGACTGGGGCTAAGGTTACCTTC  
AS\_Tasmanian\_Ssa02\_sdY TCTTGATCCAGAGCGCTCAGGACCTCAGACTGGGGCTAAGGTTACCTTC  
AS\_Tasmanian\_Ssa03\_sdY TCTTGATCCAGAGCGCTCAGGACCTCAGACTGGGGCTAAGGTTTACCTTC  
AS\_European\_sdY TCTTGATCCAGAGCGCTCAGGACCTCAGACTGGGGCTAAGGTTACCTTC  
AS\_Tasmanian\_Ssa06\_sdY TCTTGATCCAGAGCGCTCAGGACCTCAGACTGGGGCTAAGGTTACCTTC  
Chinook\_sdY -----  
RT\_sdY -----



BT\_sdY CAACAGGACAACGACCGTAAACACACAGCCAAGAAAACGCAGGAGTGGCT  
AS\_Tasmanian\_Ssa02\_sdY CAACAGGACAACGACCGTAAACACACAGCCAAGACAACGCAGGAGTGGCT  
AS\_Tasmanian\_Ssa03\_sdY CAACAGGACGACGACCGTAAACACACAGCCAAGACAACGCAGGAGTGGCT  
AS\_European\_sdY CAACAGGACAACGACCGTAAACACACAGCCAAGACAACGCAGGAGTGGCT  
AS\_Tasmanian\_Ssa06\_sdY CAACAGGACAACGACCGTAAACACACAGCCAAGACAACGCAGGAGTGGCT  
Chinook\_sdY -----  
RT\_sdY -----

BT\_sdY TCGGGACAAGTCTCTGAATTTTCATTCACGAGCACGGACTTGAACCCGATC  
AS\_Tasmanian\_Ssa02\_sdY TCAGGACAAGTCTCTGAATTTTCATTCATGAGCACGGACTTGAACCCGATC  
AS\_Tasmanian\_Ssa03\_sdY TCAGGACAAGTCTCTGAATTTTCATTCATGAGCACGGACTTGAACCCGATC  
AS\_European\_sdY TCAGGACAAGTCTCTGAATTTTCATTCATGAGCACGGACTTGAACCCGATC  
AS\_Tasmanian\_Ssa06\_sdY TCAGGACAAGTCTCTGAATTTTCATTCATGAGCACGGACTTGAACCCGATC  
Chinook\_sdY -----  
RT\_sdY -----

BT\_sdY TAACATCTCTGTAGAGACCTGAAAATAGCTGTGCAGCGACATTTCCCATC  
AS\_Tasmanian\_Ssa02\_sdY TAACATCTCTGTAGAGACCTGAAAATAGCTGTGCAGCGACATTTCCCATT  
AS\_Tasmanian\_Ssa03\_sdY TAACATCTCTGTAGAGACCTGAAAATAGCTGTGCAGCGACATTTCCCATT  
AS\_European\_sdY TAACATCTCTGTAGAGACCTGAAAATAGCTGTGCAGCGACATTTCCCATT  
AS\_Tasmanian\_Ssa06\_sdY TAACATCTCTGTAGAGACCTGAAAATAGCTGTGCAGCGACATTTCCCATT  
Chinook\_sdY -----  
RT\_sdY -----

BT_sdY	CAACCTGACAGAGCTTGAGAGGATCTGCAGAGAATAATGAGAGAACTCC
AS_Tasmanian_Ssa02_sdY	CAACCTGACAGAGCTTGAGAGGATCTGCAGAGAAGAATGAGAGAACTCC
AS_Tasmanian_Ssa03_sdY	CAACCTGACAGAGCTTGAGAGGATCTGCAGAGAAGAATGAGAGAACTCC
AS_European_sdY	CAACCTGACAGAGCTTGAGAGGATCTGCAGAGAAGAATGAGAGAACTCC
AS_Tasmanian_Ssa06_sdY	CAACCTGACAGAGCTTGAGAGGATCTGCAGAGAAGAATGAGAGAACTCC
Chinook_sdY	-----
RT_sdY	-----

BT_sdY	CCAAATACAGGTGTGCCAAGCTTGTAGCGTCATACCCAAGAAGACTCGAT
AS_Tasmanian_Ssa02_sdY	CCAAATACAGGTGTGCCAAGCTTGTAGCGTCATACCCAAGAAGACTTGTAT
AS_Tasmanian_Ssa03_sdY	CCAAATACAGGTGTGCCAAGCTTGTAGCGTCATACCCAAGAAGACTTGTAT
AS_European_sdY	CCAAATACAGGTGTGCCAAGCTTGTAGCGTCATACCCAAGAAGACTTGTAT
AS_Tasmanian_Ssa06_sdY	CCAAATACAGGTGTGCCAAGCTTGTAGCGTCATACCCAAGAAGACTTGTAT
Chinook_sdY	-----
RT_sdY	-----

BT_sdY	GCTGTAATCGCTGCCAAAGGTGTTTCAACAAAGTACTGAGTAAAGGGTCT
AS_Tasmanian_Ssa02_sdY	GCTGTAATCGCTGCCAAAGGTGCTTCAACAAAGTACTGAGTAAAGGGTCT
AS_Tasmanian_Ssa03_sdY	GCTGTAATCGCTGCCAAAGGTGCTTCAACAAAGTACTGAGTAAAGGGTCT
AS_European_sdY	GCTGTAATCGCTGCCAAAGGTGCTTCAACAAAGTACTGAGTAAAGGGTCT
AS_Tasmanian_Ssa06_sdY	GCTGTAATCGCTGCCAAAGGTGCTTCAACAAAGTACTGAGTAAAGGGTCT
Chinook_sdY	-----T
RT_sdY	-----T

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BT_sdY      GAATACTTATCTAAATGTGATATTTTC-----CGTTTTAA----AT-
AS_Tasmanian_Ssa02_sdY  GAATACTTATCTAAATGTGATATTTTC-----CGTTTTAA----AT-
AS_Tasmanian_Ssa03_sdY  GAATACTTATCTAAATGTGATATTTTC-----CGTTTTAA----AT-
AS_European_sdY        GAATACTTATCTAAATGTGATATTTTC-----CGTTTTAA----AT-
AS_Tasmanian_Ssa06_sdY  GAATACTTATCTAAATGTGATATTTTC-----CGTTTTAA----AT-
Chinook_sdY            GAATACTCATGTAAATGTAATATTTCAATTTTTTTTTTATTTCATTTTTTT-
RT_sdY              GAATACTCATGTAAATGTAATATTTCAAAAACAAATATTTCAA----ATG
*****  ** ***** *****                               *** **      *

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BT_sdY      TTGTAAT--GAATTGGCTAATATTTCTAAAAACCTGTTTTTTGCTTTGTCA
AS_Tasmanian_Ssa02_sdY  TTGTAAT--GAATTGGCTAATATTTCTAAAAACCTGTTTTTTGCTTTGTCA
AS_Tasmanian_Ssa03_sdY  TTGTAAT--GAATTGGCTAATATTTCTAAAAACCTGTTTTTTGCTTTGTCA
AS_European_sdY        TTGTAAT--GAATTGGCTAATATTTCTAAAAACCTGTTTTTTGCTTTGTCA
AS_Tasmanian_Ssa06_sdY  TTGTAAT--GAATTGGCTAATATTTCTAAAAACCTGTTTTTTGCTTTGTCA
Chinook_sdY            TTTAAAT--AAATTGGCTAATATTTCTACACACCTGTTTTTTCTTTGTCA
RT_sdY              TTTTAATAGAAATTGGCTAATATTTCTACACACCTGTTTTTTCTTTGTCA
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BT_sdY      TTATGGGGTATTGTGTGTAGATAATGA-GGGAAAAAACTATTTAATCCA
AS_Tasmanian_Ssa02_sdY  TTATGGGGTA-TGTGTGTAGATTAATGAGGGGAAAAAACTATTTAATCCA
AS_Tasmanian_Ssa03_sdY  TTATGGGGTA-TGTGTGTAGATTAATGAGGGGAAAAAAACAATTTAATCCA
AS_European_sdY        TTATGGGGTA-TGTGTGTAGATTAATGAGGGGAAAAAAACAATTTAATCCA
AS_Tasmanian_Ssa06_sdY  TTATGGGGTA-TGTGTGTAGATTAATGAGGGGAAAAAACTATTTAATCCA
Chinook_sdY            TTGTGGGGTATTGTGTGTAGATAATGA-GGGAAAAAGCAATTTAATCAA
RT_sdY              TTGTGGGGTATTGTGTGTAGATTAATGAGGGGAAAAGA-AATTTAATCAA
** ***** ***** ***** ***** ***** ***** *

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BT\_sdY TTTTAGAATAAGGCTATAATGTAACAAAACGTGGAAAAAGTCAAGGGGTC  
AS\_Tasmanian\_Ssa02\_sdY TTTTAGAATAAGGCTATAATGTAACAAAACGTGGAAAAAGTCAAGGTGTC  
AS\_Tasmanian\_Ssa03\_sdY TTTTAGAATAAGGCTATAATGTAACAAAACGTGGAAAAAGTCAAGGTGTC  
AS\_European\_sdY TTTTAGAATAAGGCTATAATGTAACAAAACGTGGAAAAAGTCAAGGTGTC  
AS\_Tasmanian\_Ssa06\_sdY TTTTAGAATAAGGCTATAATGTAACAAAACGTGGAAAAAGTCAAGGTGTC  
Chinook\_sdY TTTTGGAATAATGCTGAAATGTAACACAATTTGGAAAATGTCAAGGAG--  
RT\_sdY TTTTGGAATAATGCTGAAATGTAACACAATTTGGAAAATGTCAAGGAGAC  
\*\*\*\*\* \*\*

BT\_sdY TGAATCCTTTCCCAATGCACTGTATATGTGTGAATGTGTATGAGGCATTA  
AS\_Tasmanian\_Ssa02\_sdY TGAATACTTTCCCAATGCACTGTATATGTGTGAATGTGTATGAGGCGTTA  
AS\_Tasmanian\_Ssa03\_sdY TGAATACTTTCCCAATGCACTGTATATGTGTGAATGTGTATGAGGCGTTA  
AS\_European\_sdY TGAATACTTTCCCAATGCACTGTATATGTGTGAATGTGTATGAGGCGTTA  
AS\_Tasmanian\_Ssa06\_sdY TGAATACTTTCCCAATGCACTGTATATGTGTGAATGTGTATGAGGCGTTA  
Chinook\_sdY -----ACTTTCCCAATGC-----ATATGTGTAAATGTGTATGGGGCCTTA  
RT\_sdY TGAATACTTTCCCAATGC-----ATATGTGTAAACGTGTATGGGGCCTTA  
\*\*\*\*\* \*\*

BT\_sdY CAGA-----GCCACTTGATGTTGATTATAATTAGATGTT-AACAATCCTT  
AS\_Tasmanian\_Ssa02\_sdY CAGA-----GCCACTTGATGTTGATTATAATTAGATGTT-CACAATCCTT  
AS\_Tasmanian\_Ssa03\_sdY CAGA-----GCCACTTGATGTTGATTATAATTAGATGTT-CACAATCCTT  
AS\_European\_sdY CAGA-----GCCACTTGATGTTGATTATAATTAGATGTT-CACAATCCTT  
AS\_Tasmanian\_Ssa06\_sdY CAGA-----GCCACTTGATGTTGATTATAATTAGATGTT-CACAATCCTT  
Chinook\_sdY CTTACTTACTCCACTTGGTGTGATTAT-----AATCTTT  
RT\_sdY CTTACTTACTCCACTTGGTGTGATTATAATTAGATGTTGAACAATCTTT  
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		exon4	
BT_sdY		CCTTCTCCAG	ATTAAATTGCCATGGGCTCAGCAGCTATTCAAGCAAGCTC
AS_Tasmanian_Ssa02_sdY		CCTTCTCCAG	ATTAAATTGCCATGGGCTCAGCAGCTATTCAAGCAAGCTC
AS_Tasmanian_Ssa03_sdY		CCTTCTCCAG	ATTAAATTGCCATGGGCTCAGCAGCTATTCAAGCAAGCTC
AS_European_sdY		CCTTCTCCAG	ATTAAATTGCCATGGGCTCAGCAGCTATTCAAGCAAGCTC
AS_Tasmanian_Ssa06_sdY		CCTTCTCCAG	ATTAAATTGCCATGGGCTCAGCAGCTATTCAAGCAAGCTC
Chinook_sdY		CCTTCTCCAG	ATTAAATTGCCATGGGCTCAGCAGCTATTCAAGGAAGTTC
RT_sdY		CCTTCTCCAG	ATTAAATTACCATGGGCCAGCAGCTATTCAAGGAAGTTC
		*****	***** ***** ***** ***** ***** ** *

		exon4		
BT_sdY		ACGACTTCAGGATCTGGCTTGAGTCCTCCCCTGTCTCTCCTGGAGTCTGA		
AS_Tasmanian_Ssa02_sdY		ACGACTTCAGGATCTGGCTTGAGTCCTCCCCTGTCTCTCCTGGAGTCTGA		
AS_Tasmanian_Ssa03_sdY		ACGACTTCAGGATCTGGCTTGAGTCCTCCCCTGTCTCTCCTGGAGTCTGA		
AS_European_sdY		ACGACTTCAGGATCTGGCTTGAGTCCTCCCCTGTCTCTCCTGGAGTCTGA		
AS_Tasmanian_Ssa06_sdY		ACGACTTCAGGATCTGGCTTGAGTCCTCCCCTGTCTCTCCTGGAGTCTGA		
Chinook_sdY		ATGACTTCAGGATCTGGCTTGAGTCCTCCCCTGTCTCTCCTGGAGTCTGA		
RT_sdY		ATGACTTCAGGATCTGGCTTGAGTCCTCCCCTGTCTCTCCTGGAGTCTGA		
		*	*****	*****

BT_sdY	AAATATGGTTG--GTCCCAACAGGACTCCAATTGCTCCCAATATTAGCCT
AS_Tasmanian_Ssa02_sdY	AAATATGGTTG--GTCCCAACAGGACTCCAATTGCTCCCAATATTAGCCT
AS_Tasmanian_Ssa03_sdY	AAATATGGTTG--GTCCCAACAGGACTCCAATTGCTCCCAATATTAGCCT
AS_European_sdY	AAATATGGTTG--GTCCCAACAGGACTCCAATTGCTCCCAATATTAGCCT
AS_Tasmanian_Ssa06_sdY	AAATATGGTTG--GTCCCAACAGGACTCCAATTGCTCCCAATATTAGCCT
Chinook_sdY	AGAACCGGTTGGAGTCCCAACAGGA-----CTCCCAATATGAGCCT
RT_sdY	AGAACTGGTTGGAGTCCCAACAGGACCCCAACTGCTCCCAATATGAGCCT
	* * ***** ***** ***** ***** ***** *****

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BT_sdY      ATGCCACAGCCCTTTCCACCACACCTGTTCCCACACCCTAATCACC-TCT
AS_Tasmanian_Ssa02_sdY  ATGCCACAGCCCTTTCCACCACACCTGTTCCCACACCCTAATCACC-TCT
AS_Tasmanian_Ssa03_sdY  ATGCCACAGCCCTTTCCACCACACCTGTTCCCACACCCTAATCACC-TCT
AS_European_sdY      ATGCCACAGCCCTTTCCACCACACCTGTTCCCACACCCTAATCACC-TCT
AS_Tasmanian_Ssa06_sdY  ATGCCACAGCCCTTTCCACCACACCTGTTCCCACACCCTAATCACC-TCT
Chinook_sdY  AGGCCACAGCCTTTCCCACCAAACCTTGT-----ACCCTAATCACC-TCT
RT_sdY      AGGCCACAGCCTTTCCCACCAAACCTCT-----ACCCTAATCACCTTCT
* ***** ** ***** ** * *          ***** **

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BT_sdY      CCTCCACCTTTTTACCTCTTTTCATTCCCTATGTAAGCAGCATGCTTCTT
AS_Tasmanian_Ssa02_sdY  CCTCCACCTTTTTACCTCTTTTCATTCCCTATATAAGCAGTATGCTTCTT
AS_Tasmanian_Ssa03_sdY  CCTCCACCTTTTTACCTCTTTTCATTCCCTATATAAGCAGTATGCTTCTT
AS_European_sdY      CCTCCACCTTTTTACCTCTTTTCATTCCCTATATAAGCAGTATGCTTCTT
AS_Tasmanian_Ssa06_sdY  CCTCCACCTTTTTACCTCTTTTCATTCCCTATATAAGCAGTATGCTTCTT
Chinook_sdY  CCTCAACCTTTTCACCTATTTTCATTCCCTATGTAAACAG-----CTT
RT_sdY      CCTAAACCTTTTCACCTATTTTCATTCCCTATATAAACAG-----CTT
*** ***** *** ***** ***** *** **          ***

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BT_sdY      CCTGAGCTATAGTA-TGGCAC-----<---
AS_Tasmanian_Ssa02_sdY  CCTGAGCTATAGTATTGGCACTAT-----
AS_Tasmanian_Ssa03_sdY  CCTGAGCTATAGTATTGGCACTAT-----
AS_European_sdY      CCTGAGCTATAGTATTGGCACTATATTTCTTCCACCTCACACTAAGTAGA
AS_Tasmanian_Ssa06_sdY  CCTGAGCTATAGTATTGGCACTAT-----
Chinook_sdY  ATTGA-----GCACTATATTTATTCCATCTCACACTAAATAGA
RT_sdY      ATTGA-----GCACTATATTTATTCCATCTCACACTAAATAGA
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--sdY 3'UTR-----
BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY      AGACAATCAGCCAGTAAATAAA-----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY          AGACATTCAGACAGTAAATTAATAAATACCCTTCAAATACATAATTTTAA
RT_sdY                AGACAATCAGACAGTAAATTAATAAATACCCTTCA-----

BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY      -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY          TGTTGCTTTTTTGTCCATTTTCAGATTAATGCTTACTTCATGCTGTTTGT
RT_sdY                -----

BT_sdY -----
AS_Tasmanian_Ssa02_sdY -----
AS_Tasmanian_Ssa03_sdY -----
AS_European_sdY      -----
AS_Tasmanian_Ssa06_sdY -----
Chinook_sdY          CTGTTACAGTTG
RT_sdY                -----

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**Figure S1** CLUSTAL 2.1 multiple sequence alignment of sdY from brown trout (BT), three Tasmanian and one European Atlantic salmon, Chinook salmon and rainbow trout (RT). The boundaries of exons and locations of primers are shown.