

1	snaSmel	ATTGAGGTCT	TTTGTTCGTC	A		ACGCCA	AACATCTG	
	snaSsim	-----T	TCCATTGAA	AAAAATCT		ATGACA	ATAAAAATA	
	snaSsec	-----T	TCCATTGAA	AAAAATCT		ATGATA	ATAAAAATA	
	snaSyak	ATTGAGGTCT	TTTGTTCGTC	A		ACGCCA	AACATCTG	
	snaSere	-----AAAAATA	TCTATTGAG	AAATAATCC		AAGAAA	ATAAAAATA	
	snaSana	ATGGTTTTGA	AGTGCCTGGC	GTATATCA		AGGATG	ATGTTTTGTA	CACGAATTTG
	snaSpse	ACTGAGGTCT	TTTGTTCGCC	A		ACGACA	AACATCTG	
	snaSper	ACTGAGGTCT	TTTGTTCGCC	A		ACGACA	AACATCTG	
	snaSvir	-----TTTTTTTTT	ATGGTTCCTGA	GCCCATCTGG	CTAAAGGAAA	AAATACATGAT	GAAGTACTCG	
	snaSmoj	-----						
	snaSgri	-----TGATGGTG	ATTATGCAAA	AGCCTTGC	AGATTA	AGCAAATG		
	snaSwil	-----						
71	snaSmel	-CTTGCCACA	IGCCCCGTTT	CGGACCCATT	TTCAATACCA	AACTCAAGCC	T--GTCCAGG	CGAAGGTGTG
	snaSsim	-TGGACAAAA	TTTCAG					
	snaSsec	-TGGACAAAA	TTTCAG					
	snaSyak	-CTTGCCACA	IGCTCAGTTT	IGGTCCCAAT	TTCAACACCA	ATCTCAAGCC	T--GTCCAGG	CGAAGGTGTG
	snaSere	-TCGACAAATA	AAATTCGT					
	snaSana	GTTGAACAAA	AATGTAGTGG	AAGTATGAA	CTCTGAATTC	GG		
	snaSpse	-CTGGGCATG	TGTGGCGACT	GT		CCATCGAGCC	TCAGTCGAGA	CGTAGGTGTG
	snaSper	-CTGGGCATG	TGTGGCGACT	GT		CCATCGAGCC	TCAGTCGAGA	CGTAGGTGTG
	snaSvir	TCAGATAAAA	TIGAAGGATT	TIG	AAAG	TCTAAATTA	CGCGTTAGTT	TTTCTGTTTA
	snaSmoj	-----						
	snaSgri	-GGGCAGGA	TTTCTTCAGT	TACTACTAAT	AAATAATCTTA	TAAATAA		
	snaSwil	-----						
141	snaSmel	AACTATT---	IGGCCTG	GTGCCATTATC	TACACTTAGA	AAAAATATTGA	CATAAAATGG	ATTTTTGAAC
	snaSsim	---TATT---	TCCATT	AAGCTGTTTT	TCCAAAGGAA	CCAATATTAT	TAAATTTTAA	AC
	snaSsec	---TATT---	TCCATT	AAGCTGTTTT	TCCAAAGGAA	CCAATATTAT	TTTAA	AC
	snaSyak	AACTGTT---	IGGCCTG	GTGCCATTATC	TACAGCAGAA	AAAAATATTGG	CCTCTCAATA	ACCCAAAAC
	snaSere	---TAAG---	CAACATT	GAGATATAAT	TATTAAGATA	CAACTATTTA	AAAT	
	snaSana	---AATTAAA	GAGCAATCTA	AAATTTTGGT	TATATTTTAA	AAATCTTTTCT	AAAT	
	snaSpse	A--CGGT---	CAGCCGG	GGTCTTGACT	GTGGCCAGG	GAAATGATAA	CAGATAACAG	AT
	snaSper	A--CGGT---	CAGTCGG	GGTCTTGACT	GTGGCCAGG	GAAATGATAA	C--AGATA	GTCTG
	snaSvir	AAGTATGGTT	GAACCGTACT	GAGCCACACT	TATCGTTAAA	AAATATTITGG	TGTTGGCATA	GGCCTTTTCT
	snaSmoj	-----						
	snaSgri	-----TGATTGT	GTCTAGTGT	TTTAAATGAGA	ACATTTCTT			
	snaSwil	-----						
211	snaSmel	-----					G	GTGTTAAACA
	snaSsim	-----					A	ATTTAACAGA
	snaSsec	-----					A	ATTTAACAGA
	snaSyak	CGAATAAAAT	TTTCTTAAGA	TTTAAGATT	ACAACGGTGT	TAAAAATATAT	GATAACGTAG	AACAAAAAGG
	snaSere	-----						
	snaSana	-----					T	AATAAAAAATA
	snaSpse	-----				AGTCGTAGGA	GACAGGAGAG	AGGAGAGAGG
	snaSper	-----				AGGA	GACAGGAGAG	AGGAGAGAGG
	snaSvir	GAAACACTTAA	GCCCTCAGCG	TAAATAAAT	GGGCCGTAGGC	TATTTGGACAT	ATTTTCTAT	GTTTGGTGGG
	snaSmoj	-----						
	snaSgri	-----						
	snaSwil	-----						
281	snaSmel	AAACGGTGT	TGTTTTAAAC	AAAAAT	ACT	TCAAAATTCG	TAAAATACGA	TTATCGT
	snaSsim	GATTTTATAAT	TATTTAAAAATA	CAATT	AGCTGCAGT	TCTCAGCTCG	TAAAGGAAGG	
	snaSsec	GATTTTATAAT	TATTTAAAAATA	CAATT	AGCTGCAGT	TCTCAGCTCG	TAAAGGAAGG	
	snaSyak	AAACGGTAAA	GGTTAAAAAA	TATAC	ATTTATAA			
	snaSere	-----GATA	CAATT		ATCTGTAATC	TGACCGCTCA	TAAATGGCCAG	TCCTTGCTTA
	snaSana	TAATTTTATTT	TATAACATAA	TAAAT	ATGTTTATTT	TGACC		
	snaSpse	AGGTTGCTTA	TGCTTCACAG	AGGATGCAAA	ACTAATATTT	TTTAAACT		
	snaSper	AGGTTGCTTA	TGCTTCACAG	AGGATGCAAA	ACTAATATTT	TTTAAACT		
	snaSvir	TGATATTTTT	GAGTAGAGAT	CAAAAT	AAAAATATCT	TTAAATGGTT	TATTTGGCTGC	CTAACTT
	snaSmoj	-----						
	snaSgri	---TTCCAAC	GATCAAAATCT	CAATTCTGATC	ATTTTTGGCT	CCGAAGTTTT	CG	
	snaSwil	-----						

351

snaSmel	TAAAAACC					ATCG	TAACCATTTA	AATATACCCCT
snaSsim	AAGAAAT					AATG	CAATTGGCCC	ACTT
snaSsec	AAGAAAT					AATG	CAATTGGCCC	ACTT
snaSyak	AAAAATTA					GGAA	TTAACAGCTA	AATGATTCAA
snaSere	AGTAGCC					ACIT	CTCGTTACTC	AITTCATATC
snaSana						GCAA	TAALTGACCA	ATTTAGACCA
snaSpse	TAAAACTG					ATAG	GAAATGACCC	AAT
snaSper	TAAAACTG					ATAG	GAAATGACCC	AAT
snaSvir	CAAAACTTTG	GCTGGGGTAT	GGTTTATTAT	AATCCAGCCA	ATTCAGGAAA	TGTTCTATCC		AATTTACCAT
snaSmoj								
snaSgri							TAACTTTCT	AATGCAATTA
snaSwil								

421

snaSmel	TTCATACCAT	TTACATACTT	AATTATTTAA	AATAGAAGAG	GTTCACATA	TATTTTCCGT	TTTCCAAA	
snaSsim		ATTTCATAATC	ATTA--TT	GCCTCAACAG	GTAGTAGGTT	GTTTCACACT	TGCCCGAATC	
snaSsec		ATTTCATAATC	ATTA--TT	GCCTCAACAG	GTAAATAGGTT	GTTTCACACT	TGCCCGAATC	
snaSyak	TTATATAAAT	GCATTTACTT	AGTCATTT	ATTTACATCA	ATTTTTTTGAA	AACTTACGTT	TCCC AATATA	
snaSere	CATCTTATTC	ATTTCGATCC	ATTC--TT	GCCTCAACAG	GTAGTAGGTT	GTTTCACACT	TGCCCGAATC	
snaSana	AAGATCACCT	ATCAAGGTTT	GTTTATTT	TCGTCAACAG	GTAGTCGGCT	AATTAGCACT	TGCCCGAATC	
snaSpse		AATAG	GGCCTTGCCC	TCCTGTCT	ACCCATGGGA	ATTATATTAT	TCCTAACTGT	TGTT
snaSper		AATAG	GGCCTTGCCC	TCCTGTCT	ACCCATGGGA	ATTATATTAT	TCCTAACTGT	TGTT
snaSvir	GATAAAAAATA	ACAGGAATCG	TGTCATTT	GCCTTGCCAA	GTATCTTCTG	GATTCCCTTT	TATCAGTIACC	
snaSmoj				TC AACAG	GTAGTTAAACA	GGAT--ATGTG	TGTCCGCAC	
snaSgri	GTTCTAATCA	TTATGACCTT	TAAGGCTT	ACTTTGGCAG	GTAGTTGTGA	TCGTGGAGACA	CACACACACA	
snaSwil								

491

snaSmel								
snaSsim	CACGA				CAA	AG		
snaSsec	CACGA				CAA	AG		
snaSyak	AATTTCTACT	TT			CCG	AA		
snaSere	CAAGT				CAA	AG		
snaSana	CGGGACAA							
snaSpse								
snaSper								
snaSvir	AAACAGCCCA	GTCTGCTAAT	GTCTTTATCA	CGATGCCAAT	AAACTGTCAA	TAAGTTGAAC	TGGAAGCTCG	
snaSmoj								
snaSgri	CAGAAT							
snaSwil								

561

snaSmel							CTAG	TTG	ACAT
snaSsim							ACAC	CTG	ACAC
snaSsec							ACAC	CTG	ACAC
snaSyak							CTAG	CTG	TAAT
snaSere							GCAC	CTG	ACAC
snaSana							TCAC	CTG	CCCACGC
snaSpse								CTG	
snaSper								CTG	
snaSvir	TTAAGATACT	CTGGCACTAT	GCAAAAGGTCT	AGCCAAATCA	ACAGGTAGCT	ACCCGCACAC		TTG	ACAC
snaSmoj						ACAC		TTG	CCAC
snaSgri						ACAC		TTG	ACAC
snaSwil								TTG	

631

snaSmel	TTTTTGGGT	GTAACGTGTA	T--AGGTGTG	T--ACCTTC	AAAGTCCCAT	GTGCCAGTCT	CTCTCA	
snaSsim	GT--GTC	ATAGGT	CAGCG	TGAGATATTG	GCAA--AT	GTTTA--CCT	GT	
snaSsec	GT--GTC	ATAGGT	CAGCG	TGAGATATTG	GCAA--AT	GTTTA--CCT	GT	
snaSyak	TTTTTGTGGT	GTAACGTGGA	T--AGGTGTA	GGATTCCTTC	GAAGTCCCAT	GTGCCAGTCT	CTCTCA	
snaSere	GT--GTC	ATAGGT	CAGCG	TGAGCTATTG	GCAA--AT	GTTTA--CCT	GT	
snaSana	GTGGGTGGCC	AATAGC	CAGCG	TGAGATATTG	GCAA--AT	GTTTA--CCT	GT	
snaSpse	TTGTTCTAGG	AAAAATCATTC	TCGAGGTG--G	GAATATGTTG	GTGA--AT	CTTCAGGTCT	TTTCCAAGGG	
snaSper	TTGTTCTAGG	AAAAATCATTC	TCGAGGTG--G	GAATATGTTG	GTGA--AT	CTTCAGGTCT	TTTCCAAGGG	
snaSvir	GT--GTC	AGAAGC--A	ACAGGCTGTA	TGTTTTATTG	GCAA--AT	GTTTA--CCT	GT	TTG
snaSmoj	GC--GTC	AGGGGC--A	ACAGGCTGTA	TTTAATATTG	GCAA--AT	GTTTA--CCT	GT	TTG
snaSgri	GT--GTC	AAAGCTAACC	ACAGCTGTCA	TATTATATTG	GCAA--AT	GTTTA--CCT	GT	TTG
snaSwil					CAT	GCTTA--CCT	G	

701

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snaSmel  ---CCTTGGTCCTACCTTCGA-----CTTCGCTGGGCTC---
snaSsim  ---TCCACATGACTACCTGCGATG-----CTGCGCCGG-----
snaSsec  ---TCCAGATGACTACCTGCGATG-----CTGCGCCGG-----
snaSyak  ---CCTTGA TCCTACCTTCGA-----CTTCGCTGGGCTC---
snaSere  ---CCAGATGACTACCTGCGATG-----CTGCGCCGG-----
snaSana  ---CCGCCGTGCTTACCTGCGGTG-----AAATGAGCCTGCGCCGG
snaSpse  TGGTCCTCCGTCATACCTCCGA-----CTTCGCTCAGGCTCTTC
snaSper  TGGTCCTCCGTCATACCTCCGA-----CTTCGCTCAGGCTCTTC
snaSvir  TTGTTGCCCTGCTTACCTGTCC-----GCAGGAGAGCCTCAAGGCTTGCGCCTGCGCCGG
snaSmoj  CTGTGCTGTGTTTACCTGTCCACTGGCA-----GGCGGCAGCTCTAGGGCATGCGCCTGCGCCGG
snaSgri  CTGTGCTGTGTTTACCTGTGTAG-----GAAAGAGTCTGCGTCTGCGCCGG
snaSwil  ---CCACCTCTCTCTCTCGCAG-----AGAGCCTGCGCCGG

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771

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snaSmel  ---TCCGTTTTCCTCCATGA-----G
snaSsim  ---CGCATAGAGTCAA GTGTCCGGTCA-----G
snaSsec  ---CGCATAGAGTCAA GTGTCCGGTCA-----G
snaSyak  ---TGC GTTTTCCTCCATGA-----G
snaSere  ---CGCATAGAGTCAA GTGTCCGGTCA-----G
snaSana  ---CGCATAGAGTCAA GTGGCCGGGCCGACAGGGGTGACGAAAGTGCACGTGCGGATGTGGTGGCTA
snaSpse  TGGCCCATGCAAGTGTGCA TTTTCCTCCACCAGGGCCAACA-----GGGCCGAGA
snaSper  TGGCCCATGCAAGTGTGCA TTTTCCTCCACCAGGGCCAACA-----GGGCCGAGA
snaSvir  ---CGCATAGTCAA GTGCTGCTCA-----GTGGCC-----CGGTAGTTGG
snaSmoj  ---CGCATAGAGTCAA GTGCGGCTCA-----TTGGCTCGCTATTGGTGG
snaSgri  ---CGCATAGAGTCAA GTGCGGCTCA-----TTGGCC-----CGCTGGTCA
snaSwil  ---CGCATAGAGTCAA GTGG-----GTGG-----CGCTGGTCA

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841

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snaSmel  -GGGAGT---TCTCCTG---GCCCGCTCACATA TGTGGAACCTCCAACCTGCG
snaSsim  TGGGTGTGGC---CA---CTT CACA---ACC TGTCCACTCG AGATG-ACCG CGGTGTTCT
snaSsec  TGGGTGTGGC---CA---CTT CACA---ACC TGTCCACTCG AGATG-ACCG CGGTGTTCT
snaSyak  -GGGAGT---TCTCCTG---ACC GTCTCACATA TGGCGGAACCTCCAACCTGCG
snaSere  TGGGTGTGGC CTCTTTTACA---CTT TACA---ACC TGTCCACTCG AGATG-ACCG CGGTGTTCT
snaSana  TGGGTGTGGC CCAAAACACAACTTTTACA---ACC TGTCCACTCG AAATA-ACCG CAGT
snaSpse  TAGAAGCGCCCTTACCTTCA CTTTCACTCG CACAGTCTCG TTTTCAACAG TGATGGAACCTCCGGCGG
snaSper  TAGAAGCGCCCTTACCTTCA CTTTCACTCG CACCTTCTCG TTTTCAACAG TGATGGAACCTCCGGCGG
snaSvir  TGGGTGTGCC GTGTCC---TTT TACA---ACC TGTGCACTCG AGATG-ACCA CAGTTGGGA
snaSmoj  TGGGTGTGGC ATTTCG---ATT TACA---ACC TGTGCACTCG AAATG-ACCA CAGATGAGCT
snaSgri  GGGGTGTGGC AAGTC---CTT TACA---ACC TGTGCACTTG AGATG-ACCA CAGTTGAGAG
snaSwil  TGGAGTTACT ACCTTTTCTC---TGC ACCACTCACT TGTCCACTTC AGATACAACA CAGTTGACT

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911

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snaSmel  -----GAGGTGGG AAAACAAACA GGACTGG-----CGGTACTGG-----
snaSsim  -----GG CCAATTAGTCG GTGCTGAGTG GCA-----CTGGCTACCGG-----
snaSsec  -----GG CCAATTAGTCG GTGCTGAGTG ACA-----CTGGCTACCGG-----
snaSyak  -----GAGGTGGG AAAACAAACA GGACTGGATG-----TGCTGG-----
snaSere  -----GG CCAATTAGTCG GTGCTGAGTG GCA-----CTGGCTACCGG-----
snaSana  -----GTGCTCAC CTAGCAATCA TCGCA-----CTGGCTACTGG-----
snaSpse  -----GGACTGGA AAATCAAGCA GAGCTGCATG GCGCACGGGA GGGCGA--GG GCGAGGACAG
snaSper  -----GGACTGGA AAATCAAGCA GAGCTGCATG GCGCACGGGA GGGCGAGGGG GAGCCAACAG
snaSvir  -----GAGCGAGG CTAATAATGA TCGCAGCCCT GC-----GGCTACTGT-----
snaSmoj  GACTGTTGCTG GCGAGAGCTG CTAATTGTGA TCACAGCCCA GC-----GGCTACTGT-----
snaSgri  ATGTGTGCTG AGGAGCGAGT CTAATAATGA TCACAGCAAC AC-----GGCTACTGG-----
snaSwil  -----GCCAAG TAAAGATGGG CTAATGATGA TCGAGATGAT GCCAGGAGTT GGGCTACTGA-----CCA

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981

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snaSmel  ---TTACA CATGTGTGAG CTGG-----CCGGACC GGAG-----CACGTACTA
snaSsim  ---CCA CATGT-----CCCGTTC CTAG-----CTGGAAAGT
snaSsec  ---CCA CATGT-----CCCGTTC CTAG-----CTGGAAAGT
snaSyak  ---TCACA CATGTGTGAG CTGA-----CCGGTCC GGAG-----CACGTACTA
snaSere  ---CCA CATGT-----CCCGTTC CTAG-----CCGGAAAGT
snaSana  ---CCA CATGT-----CCA TCCAGTGCTA TTTCCCAACC-----CTGGAAAAT
snaSpse  AGCCACACACA CATGTGTGAG CAAGT-----CGTTCC AGAG-----CACGTACTA
snaSper  AGCCACACACA CATGTGTGAG CAAGT-----CGTTCC AGAG-----CACGTACTA
snaSvir  ---CCA CGTGTGGT TCAGTCTCG GCGCTGGTCA GTTTCCGTCT CAGG-----TACA
snaSmoj  ---CCT CAGTCTCAGA CTCAGTGCAG CTCAGTCTCA TCTCAGTCC GTTGGCAGCT TCAGGTACGG
snaSgri  ---CCA CGTGTGGC TCAGT-----CT GTCGCGTCT GTCGCGTCT CAGG-----TACAC
snaSwil  ACCGCGACCA CGTGTGAAG-----C TGAG-----TGGGAAAAT

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1051

snaSmel	TGCGCGTAGG	--TGCGACTC	CTTGGATTCC	C-----CAG	TTCTCCAGTT	CCCACACATC	CTGGCCGGGC
snaSsim	CTCGAGCGTA	--CTCGAATC	AGAACTTTT	C-----	-----	-----	CCCCGAAGGC
snaSsec	CTCGAGCGTA	--CTCGAATC	AGAACTTTT	C-----	-----	-----	CCCCGAAGGC
snaSyak	T--GCGTAGG	--TGCGACTC	CTTGGATTCC	CAGTTCCCAG	TTCTCCAGTT	CCCACACATC	CTGGCCGGGC
snaSere	CTGGAGCGTA	--CTCGAATT	ATAATATTT	C-----	-----	-----	CCCCGAAGGC
snaSana	CTCGAACAAA	TTCTCAAAATC	AGAACTTTT	C-----	-----	-----	ACTTCAAGGC
snaSpse	C--GCGAAGG	--TGCGAGTC	CTTGGATTCC	CATTCTCTG	-----	-----	CATGTTGTGC
snaSper	C--GCGAAGG	--TGCGAGTC	CTTGGATTCC	CATTCTCTG	-----	-----	CATGTTGTGC
snaSvir	-----G	--CGCGAGTC	ACAGTTTTC	C-----	-----	-----	GGGGCTGTGC
snaSmoj	CGTCTCTGGA	-----GAGTC	ACAGTTTTC	C-----	-----	-----	GGGGCTGTGC
snaSgri	-----	--TTCGAGTC	ACAGTTTTC	C-----	-----	-----	GGGGCTGTGC
snaSwil	TTACATCTC	--TAGGAGTC	ATAAGT	-----	-----	-----	-----

1121

snaSmel	CACATGATGA	TGTTGCTGTG	---CTTTTCC	CGTAGCGCCA	GG	-----	-----
snaSsim	AAAAAACCAA	A--GGCAACG	CCGATTTC	AGCAACACAT	GG	-----	CCGGTGGGA
snaSsec	AAAAATCCAA	A--GGCAACG	CCGATTTC	AGCAACACAT	GG	-----	CCGGTGGGA
snaSyak	CACATGATGA	TGTTGCTGTG	---CTTTTCC	CGTAGCGCCA	GG	-----	-----
snaSere	AAAAAACCAA	A--GGCAATG	CCGATTTC	GGC-ACACAT	GGACAAATGG	GACAAATGAG	TACGATGGGA
snaSana	AAAAAACCAA	AAGGGCGAGG	ACATTTTTC	AACAGC-CTC	GGACACATAT	GGATTTCGGGA	TATGTGGGAA
snaSpse	CACATGATAA	TG--TTTTGTG	---CTTTTCC	CGTAGCGCCA	GGA	-----	-----
snaSper	CACATGATAA	TG--TTTTGTG	---CTTTTCC	CGTAGCGCCA	GGA	-----	-----
snaSvir	AAAAAACCAA	T--AGCAAGG	---ATTTTCC	--TCACACAT	GGGTA	-----	ACGGTGGGA
snaSmoj	AAAAAACCAA	T--GGCAAGG	---ATTTTCC	--TCACACAT	GGACG	-----	GCGCTGGGA
snaSgri	AAAAAACCAA	T--TGCAAGG	---ATTTTCC	--TCACACAT	GGGCAA	-----	ACGGTGGGA
snaSwil	-----	-----	ATTTTTC	CCTTAGGTAT	GG	-----TAGG	TAGTGTGGGA

1191

snaSmel	-----	-----	-----	CGTGTC	ATGTTTTGTT	GCGGA--ATT	CCTCAAGGCG
snaSsim	AGATGGGAAG	T-----	-----	CGAGCCCAG	TTAT	AAA-ATC	G-----TGGG
snaSsec	AGATGGGAAG	T-----	-----	CGAGCCCAG	TTAT	AAA-ATC	G-----TGGG
snaSyak	-----	-----	-----	CGTGTC	ATGTTGTGAT	GCGGA--ATT	CCTCAAGGCG
snaSere	AGATGGGAAG	T-----	-----	CGAGCCCAG	TTAT	AAA-ATC	G-----TGGG
snaSana	AAGTGGGAAGT	TATCTGCAAT	ATCGAGACAG	CGAGCCCAG	TTAT	AAA-ATC	G-----TGGG
snaSpse	-----	-----	-----	-----	-----	AAA-ATC	-----
snaSper	-----	-----	-----	-----	-----	AAA-ATC	-----
snaSvir	AAAAGTCGCC	TTTGC	-----	CCAACCCAG	TTAT	AAA-ATC	GGTCTTTATG
snaSmoj	AAAAGTCGCC	TTTGC	-----	CCAACCCAG	TTAT	AAA-ATC	GGTCTTTATG
snaSgri	AAAAGTCGTT	TTTGTG	-----	CCAACCCAG	TTAT	AAA-ATC	GCTCTTTATG
snaSwil	AATAAGGAT	-----	-----	CCAACCCAG	TTAT	AAA-ATT	GACGTGGGAA

1261

snaSmel	AGGAATCTCG	CA	-----	-----	-----	-----	-----
snaSsim	AAAAACGCCG	CTACA	-----	-----	-----	-----	AG
snaSsec	AAAAACGCCG	CTACA	-----	-----	-----	-----	AG
snaSyak	AGAAATCTCG	CA	-----	-----	-----	-----	-----
snaSere	AAAAACGCCG	CTACA	-----	-----	-----	-----	AG
snaSana	AAAAACGCCG	CTACG	-----	-----	-----	-----	AG
snaSpse	AGAAATCTCC	CAACT	-----	-----	-----	-----	CG
snaSper	AGAAATCTCC	CAACT	-----	-----	-----	-----	CG
snaSvir	ATAATGTTGC	CAATATTGAG	AGACGTCGAC	GTCGACGTCG	CCGCCAGCGT	CAGCGTCAGC	GTCGCGTCAG
snaSmoj	ATAATGTCGC	TAATATCGAG	AGGCAGCGAC	GTC	-----	-----	AG
snaSgri	ATAATTTTGG	CAATATCGAC	AG	-----	-----	-----	AG
snaSwil	AAAAATGTG	-----	-----	-----	-----	-----	-----

1331

snaSmel	CACATTAC	-----GAGTA	GTCGGCGGTC	GCGGAAAAAA	AACA--CAGC	A	-----
snaSsim	GAAATCCCTT	TTGCGCGG	-----	ACATGGA	AATTT-CTTG	AATAAATG	-----
snaSsec	GAAATCCCTT	TTGCGCGG	-----	ACATGGA	AATTT-CTTG	AATAAATG	-----
snaSyak	CACATTAC	-----GAGGA	GTCGGCGGTC	-----GCGGAAA	AAAACACACG	A	-----
snaSere	GAAATCCCTT	TTGCGCTG	-----	ATAGGGA	AATTT-CTTG	AATAGATG	-----
snaSana	GGAATCCCTT	TTGCGGGTCA	AGCCCGGGTC	AAGAAATGGA	AATTT-CTTG	AATA	-----TAAAAGATT
snaSpse	CACATTACGG	CGGCGAGGGA	GACGGCGGTC	-----GAA	AAAACACACG	A	-----
snaSper	CACATTACGG	CGGCGAGGGA	GACGGCGGTC	-----GAA	AAAACACACG	A	-----
snaSvir	GAAATACG	-----	-----	ACATGGA	AATTT-TTTG	AATAACCGGC	-----AGACAGCTT
snaSmoj	GGAATACG	-----	-----	ACATGGA	AATTT-TTTG	AATAGCCAGC	-----AGACAGCTT
snaSgri	GAAATACG	-----	-----	ATATGGA	AATTT-TTTG	AACAACGGTC	-----TAGACAGCTT
snaSwil	-----	-----	-----	TTAGGGA	AATTTCTTG	AATAACCATAT	-----

1401

snaSmel	--	GCCAAA						
snaSsim	--	GCCCCA						
snaSsec	--	GCCCCA						
snaSyak	--	GCCAAA						
snaSere	--	GCCCCA						
snaSana	CCC	GCCCCG						
snaSpse	--	GCCAAC						
snaSper	--	GCCAAC						
snaSvir	GGT	GCCCCG	GACTGTGGGA	AGATCCGATA	GCACGAACCA	A	ACGTCC	AGAACCCAAC
snaSmoj	GGT	GCCCCG	GACTGTGGGA	AGATCCCTATA	GCACGAACCA	ACAAGCGAAC	CAACGGC	
snaSgri	GGT	GCCCCG	--CTGTGGGA	AGATCCCTATA	GCACGAACCA	ATGTGCCCAA	CTGTGGGTCTG	GAGCCCCAAC
snaSwil	--	GCCAGGA	ATCTGGAAAA	ATGCCA				

1471

snaSmel	---	GTTACA	TATGTTCTTT	GGGCCATTTA	TTCAAGAAAT	TTCCATGTCTG	GCCGAAAAGG	GA
snaSsim	---	ACAACA	TATGTAACTT	TGGC		TCGTGT		G
snaSsec	---	ACAACA	TATGTAACTT	TGGC		TCGTGT		G
snaSyak	---	GTTACA	TATGTTGTTT	GGGCCATTCTA	TTCAAGAAAT	TTCCATGTCTG	ACCGAAAAGG	GA
snaSere	---	ACAACA	TATGTAACTT	TGGC		TCGTGT		G
snaSana	---	CAGACA	TATGTAACTT	TGGC		TCGTGT		G
snaSpse	---	GTTACA	TATGTT--CCG	GGGC	GGGCGT	GTCCGAGT	CCGCAAAGG	AA
snaSper	---	GTTACA	TATGTT--CCG	GGGC	GGGCGT	GTCCGAGT	CCGCAAAGG	AA
snaSvir	GAG	CCCCAACA	TATGCAACTG	TGAC		TCGTGT		G
snaSmoj	---	GCAACA	TATGCAACTG	TGAC		TCGTGT		GTTTTTCTG
snaSgri	GGG	CCCCAACA	TATGCAACTG	TGAC		TTGTGT		G
snaSwil	---	AAAAACA	TATGCAACTT	TGGC		TCGTGT		G

1541

snaSmel	-----		TTTCCT	TGTAGGCGGC	GTTTTCCCAC	GATTTTATAA	CTGGGCTCGA	CTTCCCATCT
snaSsim	-----		TTTTTT				TCC	CCGACT
snaSsec	-----		TTTTTT				TCC	CCGACT
snaSyak	-----		TTTCCT	TGTAGGCGGC	GTTTTCCCAC	GATTTTATAA	CTGGGCTCGA	CTTCCCATCA
snaSere	-----		TTTTTT				TCC	CCGACT
snaSana	-----		TTTTTT					CCGGCT
snaSpse	-----		TTTCTC			ATTT	CCCACGGCGA	ATCCCACACA
snaSper	-----		TTTCTC			ATTT	CCCACGGCGA	ATCCCACACA
snaSvir	-----		TTTTTT		C	ACTTCGTTC	CCAAGCG	CCGGTC
snaSmoj	CTA	TTCTCTT	TTTTTTTTTT	TTTTTTTTTTGC	ATTTTGTTC	CATTTTCTAG	CCAAGCG	CCGGTG
snaSgri	-----		TTTTTT		CTTT	CGATTTCTTT	CTTTTCCCTG	CCGGTA
snaSwil	-----		TTTTTT		TGTTTT	GATATTGTAT	A-GAGCG	CCGG

1611

snaSmel	TCCCACC			GTCCA	TGTGTGTGCTG	GGAAATCGGC	GTTGCCCTTTG	GTTTTTTGCC
snaSsim	CCTC			GTA-A	TGTG-T	CGAGA-TTT	CTCGCCTTGA	GGAATTC-CG
snaSsec	CCTC			GTA-A	TGTG-T	CGAGA-TTT	CTCGCCTTGA	GGAATTC-CG
snaSyak	TCCCATCTTC	CCGCGGTGTT	CAATTTGTACA	TGTG-TGCTG	GGAAATCGGC	GTTGCCCTTTG	GTTTTTTGC	
snaSere	CCTC			GTA-A	TGTG-T	CGAGA-TTT	CTCGCCTTGA	GGAATTC-CG
snaSana	CATCTTTGTT	GGGCCTGGG		A	TGTG-T	TGAAATCGT	ATCGCCTTGA	GAAATTC-CT
snaSpse	TCCC			A	TGTG-TTTAG	GGAGTTTATT	CTTGCCCTTTG	GTTTTTTGC
snaSper	TCCC			A	TGTG-TTTAG	GGAGTTTATT	CTTGCCCTTTG	GTTTTTTGC
snaSvir	TTCCG			GTA-A	TGTG-T	-GAAATGT	-TTTCCTTGA	GAAATCC-CT
snaSmoj	TTCCG			GTA-A	TGTG-T	-GAAATTTGT	GTT-CCCTGT	GAAATCC-CT
snaSgri	CTCTC			GTA-A	TGTG-T	-GAA-TTT	TGTTCCCTTGA	GAAATCC-CT
snaSwil	-----			GTATA	TATG-T	-ATGTATGT	ACATATATGA	GAATTTCTTA

1681

snaSmel	TTGCGGGGGA	AAAAGTTCTGA	TTTGAGTGCG	CTCGAGACTT	TCCAGCTAGG	AGCAGG		
snaSsim	CAACA	AAA	TTTGGACACG	CCTGGCGCTA	C	GGGAAA	AGCACA	GC-AA
snaSsec	CAACA	AAA	TTTGGACACG	CCTGGCGCTA	C	GGGAAA	AGCACA	GC-AA
snaSyak	CTTGGGGGTG	AAAAATTATAA	TTCAAGTACG	CTCGAGACTT	TCCAGCTAAG	AGCTAAGAGC		TG
snaSere	CAACA	AAA	TTTGGACACG	CCTGGCGCTA	C	GGGAAA	AGCACA	GC-AA
snaSana	TAAAG	CAA	TGTGGACACG	CCTGGCGCTA	C	GGGAAA	AGCACAAGGA	AA
snaSpse	CTCGCAGGGG	AAA	TCT-GCCTCG	CAGCGAGACA	T	GTGAGA	ACTTCC	
snaSper	CTCGCAGGGG	AAA	TCT-GCCTCG	CAGCGAGACA	T	GTGAGA	ACTTCC	
snaSvir	TGGTCATGGT	ACA	CCTGGAC	-CCGGCGCTA	C	GGGAAA	AGCACAAGC	AA
snaSmoj	TGGCCATGGT	ACA	CCTGGAA	-CCGGCGCTA	C	GGGAAA	AGCACAAGC	AA
snaSgri	CGGATGTGGT	ACA	CCTGGACATG	GCCGGCGCTA	C	GGGAA	AGCACAAGC	AA
snaSwil	TTTTTAA		TATTTTACAG	CCTGGCGCTA	C	GGGAAA	ATCACA	GC-AA

1751

snaSmel	-----	-----	-ACATGTG-	-----	GCCGG	TAGCCAGTGC	CACTCAGTAC	C-----TCA
snaSsim	-----	-----	CATC ATCATGTG	-----	GCCC	-GGCCAGGAT	GTGTGGGAAC	TGGAGAAC--
snaSsec	-----	-----	CATC GTCATGTG	-----	GCCC	-GGCCAGGCT	GTGTGGGAAC	TGGAGAAC--
snaSyak	-----	-----	GAAACG GACATGTG	-----	GCCAG	TAGCCAGTGC	CACTCAGCAC	CGACTAAT--
snaSere	-----	-----	CATC ATCATGTG	-----	GCCC	-GGCCAGGAT	GTGTGGGAAC	TGGCGAGC--
snaSana	-----	-----	CCTC ATCATGTG	-----	GCAC	-AAACAAGGAT	--GTGAGAAT	TGGACGGCAA
snaSpse	-----	-----	C GACATGTG	-----	GCCCC	TGGCCAGTAC	CCGGTGGC	-----CGGTA
snaSper	-----	-----	C GACATGTG	-----	GCCCC	TGGCCAGTAC	TCGGTAGCCA	GTAGCTGGTA
snaSvir	TTACCGTTGA	AATTCACATT	ATCATGTG	-----	GCACA	ACAACAG	-----	-----
snaSmoj	ATGCCGTCGA	AATTCACATT	ATCATGTG	-----	GCACA	ACAACAGCAA	TGGTGGCCAC	AGAT-----
snaSgri	TTACCTTAGG	AATTCACATC	ATCATGTG	-----	GCAGA	ATAGCAACAA	CAACTGCAAC	AG-----
snaSwil	-----A	AAGAAGCATT	ATCATGTGTG	TGTGTGTTTG	TGALTGGAAC	CTCCTA	-----	-----CGTAA

1821

snaSmel	CTCAGTCTAA	TGGCCAGA	-----	-----	-ACACC	-----	GCGGTC	ATCTCGAG--
snaSsim	-----TGGGA	ATCCAAGG	-----	AGT	CGCACCT	-----	ACGCAT	AGTACGTGCT
snaSsec	-----TGGGA	ATCCAAGG	-----	AGT	CGCACCT	-----	ACGCAT	AGTACGTGCT
snaSyak	-----	TGGCCAGA	-----	-----	-ACACC	-----	GCGGTC	ATTTTCGAG--
snaSere	-----TGGGA	ATCCAAGG	-----	AGT	CGCACCTAGG	CATAACGCAT	AGTACGTGCC	-----
snaSana	A-----TGGGA	ATCCAAGG	-----	ACT	CGCACCTACG	AAG-AGTTGT	AGTACGTGCT	-----
snaSpse	GCCGGTAGCG	AACCGAGCGC	ACTGATCATC	ATTAGGCCGC	TCAACGCACA	AAGTGCGGTC	ATCTCGAG--	-----
snaSper	GTCGGTAGCG	AACCGAGCGC	ACTGATCATC	ATTAGGCCGC	TCAACGCACA	AAGTGCGGTC	ATCTCGAG--	-----
snaSvir	-----	CCAGA	-----	GAT	CGCACCT	-----	ACGCTT	GGTACGTGCT
snaSmoj	-----	-----	-----	-----	CGCACCT	-----	-----	GGTACGTGCT
snaSgri	-----CAACA	ACACCAAC	-----	AATTGCCGAT	CGCACCTAC	-----	GCTTGT	GGTACGTGCT
snaSwil	ATGGGC AAAAG	GTGCGAGA	-----	AGCAATACTG	CGCACAT	-----	ACGTTT	AGTACGTGCT

1891

snaSmel	-TGGACAGGT	TGTA--AAG	TGGCCACAC-	-----	-----	CCGCC	GACCGGACAC	TTGACTCTAT
snaSsim	CCGGTCCGGC	C-----	AGTCACACAC	TGTGTAACCA	GCAC-CGCCA	GTCCGTGTTTG	TTTTCCC--	-----
snaSsec	CCGGTCCGGC	C-----	AGTCACACAC	TGTGTAACCA	GCAC-CGCCA	GTCCGTGTTTG	TTTTCCC--	-----
snaSyak	-TGGACAGGT	TGTA--AAC	TGGCCACACC	CACGGACAC-	-----	CC	GACCGGACAC	TTGACTCTAT
snaSere	CCGGTCCGGT	C-----	AGTCACACAC	TGTGCAACCA	TCAC-TGCCA	GTCCGGTITG	TTTTCCC--	-----
snaSana	CCGGTCCGGT	CTTT	AGTCACACAC	TGTGTCCATG	GCCT-CTGCG	CAGTCGGTTT	TCGTTCTGTT	-----
snaSpse	-TGGACAGGT	TGTAACGAGG	AGGACACTCC	TACGGCTCCG	GGCC-TCACA	GACCTCAGAC	TTGACTCTAT	-----
snaSper	-TGGACAGGT	TGTAACGAGG	AGGACACTCC	TACGGCTCCG	GGCC-TCACA	GACCTCAGAC	TTGACTCTAT	-----
snaSvir	CTGACGAGTC	CCTCAACGTG	GGCTCTCATA	TGTGTCCATG	TCCT-CAGTC	CTCCGTCTCT	T---GCCAT	-----
snaSmoj	CTG	-----	-----	-----	-----	-----	-----	-----
snaSgri	TTAACTAGTT	CCTCAACTTG	GATTCTCACA	TATGTCCATG	TTGC-ATTCC	CAGCACATGC	CCTACGCCCT	-----
snaSwil	AGTGGCACAT	ATGTGTCCAG	TGTCTTGCC	CAGCGCCATG	CCGCATTTCC	GATCAGTTTG	TTTTTCCAAA	-----

1961

snaSmel	GCGCCGGCGC	-----	-----	AGCATCGCAG	GTAGTCATCT	GGAACAGGT	---AAACATT	-----
snaSsim	-----	-----	-----	AGCTCCGCAG	TTGGAGTTCC	GACATATGT	---GAGCGGG	-----
snaSsec	-----	-----	-----	AGCTCCGTAG	TTGGAGTTCC	GACATATGT	---GAGCGGG	-----
snaSyak	GTGCCGGCGC	-----	-----	AGCATCGCAG	GTAGTCATCT	GGAACAGGT	---AAACATT	-----
snaSere	-----	-----	-----	AGCTCCGCAG	TTGGAGTTCC	GCCATATGT	---GAGAGGG	-----
snaSana	TTTCCATCGG	-----	-----	AGTTCGGGAG	TTGGAGTAAC	GCCATGTTTG	TGCGGGAGGG	-----
snaSpse	GCGCCGGCGC	-----	-----	-----	-----	-----	-----	-----
snaSper	GCGCCGGCGC	-----	-----	-----	-----	-----	-----	-----
snaSvir	GCGCGGTTGT	-----GCT	TGTTTTCCCA	ATTATCTCAG	CATACGTTGC	CAAAAAGGT	---AGAGGCG	-----
snaSmoj	-----	-----	-----	-----	-----	-----	-----	-----
snaSgri	GCCGGGTTCC	ATTGTGTTTC	CCAAATCCCA	ATTATCTCAG	CATACGTTGC	CAAAAAGGT	---AGAGGCG	-----
snaSwil	ATCCAATTTT	-----	-----	AGTCACACAC	TGCTAAATAC	AAAA-AGGT	---AAAGGCG	-----

2031

snaSmel	TGCCAATATC	TCAC	-----	-----	-----	-----	-----	-----
snaSsim	CCAGGAGAAC	TCCC	-----	-----	-----	-----	-----	-----
snaSsec	CCAGGAGAAC	TCCC	-----	-----	-----	-----	-----	-----
snaSyak	CGCAAAATATC	TCAC	-----	-----	-----	-----	-----	-----
snaSere	CCAGGAGAAC	TCCC	-----	-----	-----	-----	-----	-----
snaSana	CCAGGAGAAC	TCAA	-----	-----	-----	-----	-----	-----CTCCCT
snaSpse	-----	-----	-----	-----	-----	-----	-----	-----
snaSper	-----	-----	-----	-----	-----	-----	-----	-----
snaSvir	CTAAAAATTG	TTTA	-----	TTTTTCATTT	GTTGGAAATT	CAGACTTTTG	CACGGCCATC	-----
snaSmoj	-----	-----	-----	-----	-----	-----	-----	-----
snaSgri	CTAAAAATTG	TTTAGCGAGG	CTCTGCTGGA	GTTTCTATTT	GTTGGAAACT	TGGTTTTTGG	CATG-----	-----
snaSwil	CTAAAAATTT	TCTT	-----	-CTAAAGGCT	GTTGGAAAAT	TGCTAACTCT	CACATATTGC	-----

2101

snaSmel	-----	-----	-GOTGACCTA	TG-ACACGTG	TCAGGTGTCT	TTGTCTGTGA	-----
snaSsim	-----	T CATGGGAAAA	CGGAGAGCCC	AG-CGAAGTC	GAAGGTAGGA	CCAAGGTGAG	AGAGA-----
snaSsec	-----	T CATGGGAAAA	CGGAGAGCCC	AG-CGAAGTC	GAAGGTAGGA	CCAAGGTGAG	AGAGC-----
snaSyak	-----	-----	-GOTGACCTA	TG-ACACGTG	TCAGGTGTCT	TTGTCTGTGA	-----
snaSere	-----	T CATGGGAAAA	CGGAGAGCCC	AA-CGAAGTC	GAAGGTAGGA	CCAAGGTGAG	AGGGACT---
snaSana	GCCGGGCCCT	GGTGGGAAAA	CGGAGAGCCC	AGTGAAGTC	GAAGGTAGCA	CCGACGAGGT	GA-----
snaSpse	-----	-----	AGG	GG-CGCAGTC	GCAGGCTTCC	GCA-----	-----
snaSper	-----	-----	AGGCGCA	GG-CGCAGTC	GCAGGCT---	-----	-----
snaSvir	GGCCATTCGGC	CATGGGAACC	AG-----CC	TG-GGAAGTC	GAAGGTAGAA	CGGAGGTGAA	ATTGCTTTCA
snaSmoj	-----	CATCAGC	CATGGGAACC	AACCAAGCCT	-G-AGAAGTC	GAAGGTGAGC	AAGG-----
snaSgri	---	CATCAGC	CATGGGAACC	AACCAAGCCT	-G-AGAAGTC	GAAGGTGAGC	AAGG-----
snaSwil	CGCC-----	T CACATGTTTG	TCCTGAGCCT	AAGAGAAGTC	GAAGGTGGAA	AAATGACGAG	CGGAAAAGTTG

2171

snaSmel	-TTCTGGGCA	AGT-----	-----	-----	-----	-----	-----
snaSsim	-CTGGCACA	TGG-----	-----	-----	-----	-----	-----
snaSsec	-CTGGCACA	TGG-----	-----	-----	-----	-----	-----
snaSyak	-TTCTGGGCA	TGT-----	-----	-----	-----	-----	-----
snaSere	-CTGGCACA	TGG-----	-----	-----	-----	-----	-----
snaSana	-GAAGGACC	AGG-----	-----	-----	-----	-----	-----
snaSpse	-CAGGTACG	AGG-----	-----	-----	-----	-----	-----
snaSper	-TCCGCACA	GCT-----	-----	-----	-----	-----	-----
snaSvir	CCCAGTGACA	GGGTTTTAC	CAAAGTCCCA	AATTCATATT	TACTGTTTGT	ACCATATATT	GAGCAITTTG
snaSmoj	-----	-----	-----	-----	-----	-----	-----
snaSgri	-CCGGAACA	AGGGTACACT	AAATCTACTA	CATATATAAA	CAGTGAGTCC	ATCTAAGATA	AATTCCTAAA
snaSwil	-TTAGCAAA	AGC-----	-----	-----	-----	-----	-----

2241

snaSmel	-----	-----	-----	-----	-----	-----	-----
snaSsim	-----	-----	-----	-----	-----	-----	-----
snaSsec	-----	-----	-----	-----	-----	-----	-----
snaSyak	-----	-----	-----	-----	-----	-----	-----
snaSere	-----	-----	-----	-----	-----	-----	-----
snaSana	-----	-----	-----	-----	-----	-----	-----
snaSpse	-----	-----	-----	-----	-----	-----	-----
snaSper	-----	-----	-----	-----	-----	-----	-----
snaSvir	TAGTGAAATT	TACATTTTAC	TTTGGCGATT	TAAATATTTA	TTTATACACA	ATTTGTATAT	TGTTCCCGAT
snaSmoj	-----	-----	-----	-----	-----	-----	-----
snaSgri	GTAACCCCTA	CGTAAATATT	TTTCATTTAC	TTCTTTTGT	TGCTTACTCA	ATTTTGAAAT	TATTTGGGAT
snaSwil	-----	-----	-----	-----	-----	-----	-----

2311

snaSmel	-----	-----	-----	-----	-----	-----	-----
snaSsim	-----	-----	GACTT	-----	-----	-----	-----
snaSsec	-----	-----	GACTT	-----	-----	-----	-----
snaSyak	-----	-----	-----	-----	-----	-----	-----
snaSere	-----	-----	GACTT	-----	-----	-----	-----
snaSana	-----	-----	-----	-----	-----	-----	-----
snaSpse	-----	-----	-----	-----	-----	-----	-----
snaSper	-----	-----	-----	-----	-----	-----	-----
snaSvir	TCAAATGGAT	GATGCTAAAA	TTGTAAATAT	ATTTGGCGCC	AACTTTAGGC	TGAAGCTGCT	TTGTAACTCC
snaSmoj	-----	-----	-----	-----	-----	-----	-----
snaSgri	TTTAAAAAAT	TTAATTATAA	TATTTGTTTT	-----	-----	-----	-----
snaSwil	-----	-----	-----	-----	-----	-----	-----

2381

snaSmel	-----	-----	GTGAAACAAC	CTACTACCTG	TTGAGGCAAT	AATGA-----	-----
snaSsim	-----	CGAA	GG-TATAT	AGCTATCACA	GTACACCGC	AAAAA-----	-----
snaSsec	-----	CGAA	GG-TATAC	AGCTATCACA	GTACACCGC	AAAAA-----	-----
snaSyak	-----	-----	-----	-GTGACCTG	TTTAGGCTAT	AATGA-----	-----
snaSere	-----	CGCA	GGGTTCCTGC	AGCTATCACA	GCTACACCAC	AAAAA-----	-----
snaSana	-----	AG	GAAAGGACAT	CTCTGCGGTA	CTTTGTTTAC	CGATA-----	-----
snaSpse	-----	-----	-----	-----	CCGAGGCCGA	GGCAG-----	-----
snaSper	-----	-----	-----	ACGTG	CAGAGGCCGA	GGCAG-----	-----
snaSvir	ACTTAAAAAGG	TTTAGCCGAA	GACTTATTAA	AAATTCAAAT	TTTAGTTGAT	GAACA-----	-----
snaSmoj	-----	-----	-----	-----	-----	-----	-----
snaSgri	-----	TTAT	GTTTGAAAAAC	ATAATTTTACA	AATAGGCTAC	AAAAAAGTAA	AGGCATAAAA
snaSwil	-----	-----	C	AGGGCTGTTG	TTTAGGCTAT	AAAAA-----	-----





