

Wen and Ladewig
Supplementary Figure 2

Alignments of mouse/human orthologous mirtrons. Shown are introns that generated small RNA duplexes in both mouse and human (highlighted), with their respective alignments across the available vertebrate genomes. Positions of divergence, with respect to the reference genome at top, are shaded in red. Note that there is not evidence for small RNA generation across most of the aligned species, and only in a small number of the species exhibit a classic "saddle-shaped" evolutionary profile in which the hairpin loop clearly evolves more quickly than does the hairpin arms (e.g. as is seen for *mir-1224*, *mir-3064*, and *mir-877*).

hsa-mir-1224

Human	GUGAGGACUCGG--GAGGUGGAGGGUGGU--GCCGCCGG--GGCCGGG-CG--CUGUUUCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Chimp	GUGAGGACUCGG--GAGGUGGAGGGUGGU--GCCGCCGG--GGCCGGG-CG--CUGUUUCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Gorilla	GUGAGGACUCGG--GAGGUGGAGGGUGGU--GCCGCCGG--GGCCGGG-CG--CUGUUUCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Orangutan	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GCCGCCGG--GGCCGGG-CG--CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Rhesus	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GCCGCCGG--GGCCAGG-CG--CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Baboon	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GCCGCCGG--GGCCAGG-CG--CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Marmoset	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GCCGCCGG--G[C]CGGG-[G]-CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Mouse_lemur	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-AUCGUCAG--GGCCUGGACG--CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
TreeShrew	GUGAGGACUCGG--GAGGUGGAGGG[C]GGG--GUCGCCAG--GGCCGGG-CG--C[C]GUCUCAGC[C]CGC-[U]-CUC	CCCCA-----CCUCCUCUCUCCUCAG
Mouse	GUGAGGACUCGG--GAGGUGGAGGGUAGG--AUCAUUAG--AGCCAGAGCU--CUGU[C]UCAGCUC[C]U--CUCC	CCCCA-----CCU[C]UCUCUCCUCAG
Rat	GUGAGGACUCGG--GAGGUGGAGGGUAGU--ACC[A]UUA--AGCCAGAGCU--CUGU[C]UCAGCUC[C]U--CUCC	CCCCA-----CCUCUUCUCUCCUCAG
Kangaroo_rat	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GUGGCCAG--GCCAGGSUG--C[A]U[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Guinea_Pig	GUGAGGACUCGG--GAGGUGGAGGGAGGSCGGUCGCC-[G]-GGCCUGGSCUGGCGUGUCCAGUUUGGCU--G	UCCCCCCA-----CCUCCUCUCUCCUCAG
Squirrel	GUGAGGACUCGG--GAGGUGGAGGGUAGU--GUCACCAG--AGCUAGAGUG--AUGU[C]UCAGCUC[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Rabbit	GUGAGGACUCGG--GAGGUGGAGGG[C]GGG--GUCGCCAG--GGCCAGAGCG--CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Pika	GUGAGGACUCGG--GAGGUGGAGGGU[AUC]-AUUGCCAG--AGCCGGG[AUG]-CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Alpaca	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GUGGCCAG--GGCCAGGSCA--CUGU[C]UCAGCUCG[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Dolphin	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-AUCGCCAG--GGCCAGGSCG--CUGU[C]UCAGCUCG[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Cow	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GUGGCCAG--GGCCAGGSCA--CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Horse	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-AUCGCCAG--GGCCAGGSCG--CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Cat	GUGAGGACUCGG--GAGGUGGAGGGUGGU--GUGGCCAG--GGCCAGGSCA--CUGU[C]UCAGCUC[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Dog	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GCCGCCAA--GGCCAGGSCA--CUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Microbat	GUGAGGACUCGG--GAGGUGGAGGGUGGU--GUGGCCAG--GGCCAGGSCA--CUGU[C]UCAGCUC[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Megabat	GUGAGGACUCGG--GAGGUGGAGGGUGGU--G[U]U-----GCCAGGCG--UUGU[C]UCAGCUC[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Hedgehog	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GUGGCCAG--GCCCGGCG--CUGU[C]UCAGCUCG[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Elephant	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-GUCGCCAA--GGCCAGGSCG--CUGU[C]UCAGCUCG[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Rock_hyrax	GUGAGGACUCGG--GAGGUGGAGGGUGGU--GUCACCAG--GGCCAGGSCA--CUGU[C]UCAGCUCG[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Tenrec	GUGAGGACUCGG--GAGGUGGAGGG[C]GGG--GUGGCCGG[C]CCGGC--GGGCG--CUGU[C]UCAGCUCG[C]U--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Armadillo	GUGAGGACUCGG--GAGGUGGAGGGUGG[C]-CUCUUGAG--GGCCGGGCG--UUGU[C]UCAGCUCGCUU-CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Sloth	GUGAGGACUCGG--GAGGUGGAGGGUGGA--CUUGUCAG--GGCCGGGCG--CUGU[C]UCAGCUCGCUU--CUCC	CCCCA-----CCUCCUCUCUCCUCAG
Wallaby	GUGAGGGUAAGACAGGAUGGAAGGA--UUUGCCAG--GGSUGGGSCA--GAG[C]CU--GGCUCGCU--CUC	ACCUGAGCCUGCCUGC[C]C[C]CUCACAG

hsa-mir-1229

Human	5UGGGUAGGGU	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUCAG	GGACACC	CUCUCA	CCACUGCCC	UC	CCA	CAG
Chimp	5UGGGUAGGGU	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Gorilla	5UGGGUAGGGU	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Orangutan	5UGGGUAGGGU	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Rhesus	5UGGGUAGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Marmoset	5UGGGUAGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Mouse_lemur	5UGCAUUGCA	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Bushbaby	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Mouse	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Rat	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Kangaroo_rat	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Guinea_Pig	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Rabbit	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Alpaca	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Dolphin	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Cow	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Horse	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Cat	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Dog	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Microbat	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Megabat	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Shrew	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Rock_hyrax	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG
Opossum	5UGCAUUGGC	UUGGGGG	A-GAGCC	UGGG	-CUGGGUUC	GGACACC	CUCUCA	CCUGCCC	UC	CC	CAG

hsa-mir-3064

Human	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Chimp	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Gorilla	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Orangutan	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Rhesus	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Baboon	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Marmoset	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Tarsier	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Mouse_lemur	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Bushbaby	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
TreeShrew	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Mouse	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Rat	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Kangaroo_rat	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Guinea_Pig	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Rabbit	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Pika	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Alpaca	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Dolphin	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Cow	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Horse	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Cat	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Dog	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Microbat	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Megabat	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Hedgehog	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Shrew	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Elephant	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Rock_hyrax	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Tenrec	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Armadillo	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Sloth	UCUGGCUGU--UGUGGUG---UGCANAACUCCG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Opossum	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Platypus	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Chicken	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Zebra_finch	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Lizard	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
X_tropicalis	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Tetraodon	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Fugu	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Stickleback	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Medaka	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Zebrafish	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG
Lamprey	UCUGGCUGU--UGUGGUG---UGCANAACUCUG---UACAUUGCUAUUUUGCCACACUGC--AACAC---CUUACAG

hsa-mir-6745

Human	UGGGUGGA	----	AGAAGG	-----	UCU--GGUU	-----	CUCA--C-CA--GGCC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Chimp	UGGGUGGA	----	AGAAGG	-----	UCU--GGUU	-----	CUCA--C-CA--GGUC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Gorilla	UGGGUGGA	----	AGAAGG	-----	UCU--GGUU	-----	CUCA--C-CA--GGCC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Orangutan	UGGGUGGA	----	AGAAGG	-----	UCU--AGUU	-----	CUCA--C-CA--GACC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Rhesus	UGGGUGGA	----	AGAAGG	-----	UCU--GGUC	-----	CUCA--C-CA--GACC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Baboon	UGGGUGGA	----	AGAAGG	-----	UCU--GGUC	-----	CUCA--C-CA--GACC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Marmoset	AGAAUGGA	----	AGAAGG	-----	UCU--GGUC	-----	CUCA--C-CA--GGCC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Mouse_lemur	UGCAUGGA	----	UAAGG	-----	UCU--UGUC	-----	CUCA--C-CA--GACC	----	C-CAUCCCUCC	-C-----	A-----	UCUAG	
Bushbaby	UACGUAGA	----	UGAAGC	-----	UCU--CCUC	-----	CUCA--U-UU--GACC	----	C-UUCCCUCC	-C-----	A-----	CCCAG	
TreeShrew	UGAGUGGC	----	GGAAGG	-----	UCU--GGUC	-----	CUCA--C-CA--GACC	----	U-C-UCCUCUCC	-U-----	C-----	UCUAG	
Mouse	UGAGUGGA	----	AGGAG	-----	U-C--UGUC	-----	CUCA--C-UG--CCUC	----	C-C-UUCUCUCU	-C-----	A-----	CCCAG	
Rat	UAGUGGA	----	AGGAG	-----	U-C--UGUC	-----	CUCA--C-UG--CCUC	----	C-C-UUCUCUCU	-C-----	A-----	CCCAG	
Guinea_Pig	UA-----	----	-----	-----	-C--AGUC	-----	CUA--A-C-UG--GCC	----	C-U-UCCUCUCC	-U-----	A-----	CCUAG	
Squirrel	UGAGUGGA	----	GAGUGG	-----	UCC--CAUC	-----	CUCA--C--JGGCACCU	----	C-C-UUCUCUCC	-U-----	A-----	CCCAG	
Rabbit	UGGGUGGA	----	AGAAGG	-----	CCU--GGUC	-----	CUCA--C-CUC--GCC	----	C-U-UUCUCC	-C-----	C-----	UCAG	
Pika	CAGGUGGA	----	AGA	GGGUGACAGUGGCGCC	CU--GGUC	-----	CUCA--C-CUC--CUC	----	A-C-AAUUUCU--GU	-----	U-----	UCAG	
Dolphin	-----	----	A	AAGG-----	UCU--UAUC	-----	CUCA--C-CA--GACC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Cow	UGAGUGGA	AGAAGA	AGAAGG	-----	UCU--UGUC	-----	CUCA--C-CA--GACC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Horse	UGAGUGGA	----	AGAAGG	-----	UCU--UGUC	-----	CUCA--C-CA--GGCC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Cat	UGAGUGGA	----	AGAAGG	-----	UCU--UGUC	-----	CUCA--C-CG--GGCC	----	C-C-UCCUGUCC	-C-----	A-----	CCCAG	
Dog	UGAGUGGA	----	AGA	CGG-----	UCU--UGUC	-----	CUCA--C-CA--GGCC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Microbat	UGAGUGGA	----	AGGAGG	-----	UCU--CGUG	-----	CUA--A-C-CA--GGUC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Megabat	UGAGUGGA	----	AGAAGG	-----	UCUUAUCAUC	-----	CUCA--C-CA--GGCC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Hedgehog	UGAGUG--	----	GGAAGG	-----	UCU--AGCG	-----	CUCA--C-CA--GGGC	----	C-U-C-AUCUCUCC	-C-----	C-----	UCUAG	
Elephant	UGGGUGGA	----	AGAAGG	-----	CCU--CAUC	-----	CUCA--C-CA--GGC	----	C-C-UCCUCUCC	-C-----	A-----	CCCAG	
Rock_hyrax	UGGAUGAA	----	UGAAGG	-----	UCU--CAUC	-----	CUCA--C-CA--GGC	----	C-U-UCCUCUCC	-C-----	A-----	CCCAG	
Tenrec	GGGUGGU	----	AGGAGG	-----	CUU--C--	-----	CUCA--C-CA--GGCC	----	C-U-UCCUCUCC	-C-----	A-----	CCCAG	
Opossum	CGAGGGGA	----	GGUGGG	-----	CCC--CAGCACGGCCG	CUA--C-CG--GUC	----	C-C-UCCUGUCC	-U-----	-----	-----	CCCAG	
Wallaby	-----	----	--CUG	-----	ACC--UGCU	-----	CCG--U-UA--CAC	----	U-C-UCUCUCU	-CUGGCUGC	-----	CCCAG	
Platypus	GGGAUGGA	----	GCGAGG	-----	GCG--AGAG	-----	CCG--A-CG--GGCC	GGCGUU	C-UCCUCUCC	-C-----	GGGCGCUG	CCCAG	
X_tropicalis	UGUCUCA	----	UGGAG	AUGGU	-----	U-----	CUCA	GGC-UG--GUGU	----	C-U-UCCUCUCC	CCAU-	-----	CCCAG

hsa-mir-6751

Human	UUGG-GGGUG-AGG---U-----UGGUG-UCUG-----GCCCCAG--CAGCCCAGACUGAGCCU-----CU---CUCUCUCC---AG
Chimp	UUGG-GGGUG-AGG---U-----UGGUG-UCUG-----GCCCCAG--CAGCCCAGACUGAGCCU-----CU---CUCUCUCC---AG
Gorilla	UUGG-GGGUG-AGG---U-----UGGUG-UCUG-----GCCCCAG--CAGCCCAGACUGAGCCU-----CU---CUCUCUCC---AG
Orangutan	GG-GGGUG-AGG---U-----UGGUG-UCUG-----GCCCCAG--CAGCCCAGACUGAGCCU-----CU---CUCUCUCC---AG
Rhesus	UUGG-GGGUG-AGG---U-----UGGUG-UCUG-----GCCCCAG--CAGCCCAGACUGAGCCU <u>UUCU</u> -----CU---CUCUCUCC---AG
Baboon	UUGG-GGGUG-AGG---U-----UGGUG-UCUG-----GCCCCAG--CAGCCCAGACUGAGCCU-----CU---CUCUCUCC---AG
Marmoset	UUGG-GGGUG-AGG---U-----UGGUG-UCUG-----GCCCCAG <u>CAG</u> -CAGCCCAGACUGAGCCU <u>CU</u> CU---CUCUCUCC---AG
Mouse_lemur	UGCA-GGUG-GGG-U-----GGU-UCAG-----GCCCAG-- <u>A</u> AGCCCAGACUGAGCCU-----CU- <u>A</u> -CUCUCUCC---AG
Bushbaby	UGCA-GGUG-GGG-U-----GGU-UCAG-----GCCCAG-- <u>CAGG</u> -CAGC-CAGACUGAGCCU-----CU- <u>A</u> - <u>CUU</u> UCUCC---AG
TreeShrew	UGCA-GGUG-GGG-U-----GGU-UCAG-----GCCCAG--CAGC-CAGACUGAGCCU-----CU- <u>A</u> -CUCUCUCC---AG
Mouse	UCU-GGGUG-GAG-A-----GGU--AG-----GCCCAG-- <u>AGC</u> CAG-CUGAGCCU----- <u>UG</u> - <u>UAU</u> CUC <u>UG</u> CC---AG
Rat	UUCA-GGUU- <u>AAG</u> -A-----GGUG-- <u>AG</u> -----GCCCAG-- <u>AGC</u> CAGACUGAGCCU----- <u>UG</u> - <u>UGU</u> CUC <u>UG</u> CC---AG
Kangaroo_rat	UUGG-GGGU- <u>AACA</u> UCA-----GGUG-- <u>AA</u> -----GCCCAG--CAGCCCAGACU <u>AAG</u> U----- <u>UC</u> - <u>CAG</u> CUUCUCC---AG
Guinea_Pig	UAGA-GGGC-GAC-A-----GGCA-- <u>G</u> <u>CAGGGGUGCCUGAU</u> G <u>CC</u> ----- <u>A</u> AGCCC <u>AA</u> CU <u>A</u> AG <u>UG</u> ----- <u>CC</u> - <u>G</u> - <u>CUAGC</u> CC---AG
Squirrel	UAGA-GGGC-GAC-A-----GGCA-- <u>G</u> <u>CAGGGGUGCCUGAU</u> G <u>CC</u> ----- <u>A</u> AGCCC <u>AA</u> CU <u>A</u> AG <u>UG</u> ----- <u>CC</u> - <u>A</u> - <u>CUAGC</u> CC---AG
Rabbit	UAGG-GGGU- <u>GG</u> -S-----GUGG-- <u>GG</u> -----GCCCAG-- <u>CAGC</u> - <u>AAAC</u> G <u>CC</u> ----- <u>UG</u> - <u>U</u> - <u>CUUCU</u> CC---AG
Pika	UGCA-GGGU- <u>GA</u> -G-----GUGA-- <u>G</u> -----GCCCAG--CAGCCCAGACU <u>AA</u> CU----- <u>UG</u> - <u>A</u> - <u>CUC</u> CU <u>C</u> ---AG
Dolphin	UUGG-AGGUG- <u>UG</u> -G-----GGUG-UCAG-----GCCCAG--CAGCCCAGACUGAGCCU-----CU- <u>G</u> -CUCUCUCC---AG
Cow	UGGG-AGGUG- <u>UG</u> -G-----GGUG-UCAG-----GCCCAG-- <u>C</u> <u>AGGG</u> UGAGCCU-----CU- <u>G</u> -CUCUCUCC <u>UU</u> AG
Horse	UAGA-GGGC-GAC-A-----GGUG-UCAG-----GCCCAG-- <u>CAG</u> <u>CCAG</u> CUGAGCCU----- <u>U</u> - <u>U</u> -CUCUCUCC---AG
Cat	UGCA-GGGU- <u>UG</u> -G-----GGCA-- <u>UC</u> AG-----GCCCAG-- <u>CGCC</u> CAGCUGAGCCU-----CU- <u>UG</u> - <u>CCU</u> CUCUCC---AG
Dog	UGCA-GGGU- <u>UG</u> -G-----GGUG-UCAG-----GCCCAG-- <u>CG</u> <u>CC</u> UGAGCCU-----CU- <u>G</u> -CUCUCUCC---AG
Megabat	UGCA-AGCA- <u>GG</u> -G-----GUU-UCAG-----GCCCAG--CAGCCCAGACUGAGCCU-----CU- <u>A</u> -CUCUCUCC---AG
Hedgehog	UGGG-GCCC-AGG-----G--UGGG-----GCG-- <u>AG</u> <u>CCC</u> UGUAGGCCU-----CU- <u>G</u> -CUCUCUCC---AG
Shrew	UGGG-AGCA- <u>GG</u> -G-----C--UCGG-----GCCCAG-- <u>AG</u> <u>CCC</u> CAGCUGAGCCU----- <u>CC</u> - <u>G</u> -CUCUCUCC---AG
Elephant	UGCA-GGGC-AGG-----GUGG-SCCA-----GCCCAG-- <u>CAGC</u> - <u>CAG</u> UGAGCCU-----CU- <u>G</u> -CUCUCUCC---AG
Opossum	UUUU-GGGU- <u>GG</u> -SAGCCUUUGGUUCCCUUGGGG-CCCA-----GCCAG-- <u>AA</u> <u>UUU</u> SC <u>AA</u> U <u>UG</u> -----CU- <u>UUG</u> CUCUC---AG
Wallaby	UGACUUGGCA- <u>CA</u> -S-----GAGG-CUU-----GCCCAG-- <u>CAG</u> <u>UUU</u> SC <u>AA</u> U <u>UG</u> -----CU- <u>U</u> -CUCUCUCC---AG
X_tropicalis	UACA-GGGU- <u>CA</u> -C-----UGU-UCUU-----C- <u>UA</u> CA--CA <u>UUUG</u> AC <u>UU</u> A <u>UU</u> ----- <u>U</u> - <u>C</u> - <u>CUACA</u> C---AG

[hsa-mir-6767](#)

Human	U CGCAGACAGGGAC ----- ACAUGGAGA ACGCCCCACCAGUCCCA--CGUGCUUC--UCUUCCGCAG
Chimp	U GCAGACAGGGAC ----- ACAUGGAGA ACGCCCCACCAGUCCCA--CGUGCUUC--UCUUCCGCAG
Orangutan	U GCAGACAGGGAC ----- ACAUGGAGA ACGCCCCACCAGUCCCA--CGUGCUUC--UCUUCCGCAG
Rhesus	U GCAGACAGGGAC ----- GCAUGGAGA AUGCC UGC CCUAGUCCCA--CGUGCUUC--UCUUCCGCAG
Baboon	U GCAGACAGGGAC ----- GCAUGGAGA AUGCC UGC CCUAGUCCCA--CGUGCUUC--UCUUCCGCAG
Marmoset	U GCAGCAGGGAC ----- A ----- CCUGC CCUAGUUC--CA--CGUGCUUC--UCUUCCGCAG
Tarsier	U GGAGACAGGGAC ----- ACUUUGAGA AC CAUG CCCUUGUU CA GGG GUGGU GC--UCUUCCGCAG
Mouse_lemur	CUGGAGAC --GGGC----- CCUGGAG C AG GGG UGCC U UG GU UCA --GG CAGCA C--UCUUCCGCAG
Mouse	GGGC --AGCU UGAU ----- GCU ----- UGUC CUAGUU UCA --CG UGG CCU CUUUU UGCAG
Squirrel	--- GUUGGGAC----- AUGCA GGG AGC --UUGUC U AGUU UCA -- AG GG UGG CU UCU UCC C AG
Rabbit	GGAU -- GGU GG AGC ----- GCU --UG UAG CG CGUG CC GGCC ----- --- -- --- CU --- UCUG CC C AG
Dolphin	UGGGAGACG --GGAC----- AC -- UCAUGA AG GC UUGGC U UGUU UCA -- GG GAUG G C--UCUU CC C AG
Cow	UGGGAGACA --GGAC CCCGUGAGGUUCGGGGC -- UCACAG AG GC UGC CU UGUU UCA -- GG GC AG C--UCUU CC C AG
Horse	UGGGGACA --GGAC----- AC -- UCGUGA U AGC UCCCUU AGUU UCA -- GG GAUG G C--UCUU --- GCAG
Cat	UG -----GGAC----- GC -- UCACA U AG UGC CC C AGUU UCA -- GG GC UGG C--UCUU CC U UGCAG
Microbat	UGGGAGACA --GGAC----- AC -- UCAUGA G CGC UCG CU UCU AGU GUUCA -- GG GG UGG C--UCUU CC AA AG
Megabat	UGGGAGACA --GGAC----- GU -- UUGUA U AUC UGC CU UCU AGU GUUCA -- GG GG UGG C--UCUU CC C AG

hsa-mir-6777

Human	ACGGG-GAG---UCAGGCAGUGG-----UGGA	GAUGGAGA-----GC---CCUGAGCCUCCACU-----CUCCUGGCC-----CCC-----AG
Chimp	ACGGG-GAG---UCAGGCAGUGG-----UGGA	GAUGGAGA-----G-----CCUGAGCCUCCACU-----CUCCUGGCC-----CCC-----AG
Gorilla	ACGGG-GAG---UCAGGCAGUGG-----UGGA	GAUGGAGA-----GC---CCUGAGCCUCCACU-----CUCCUGGCC-----CCC-----AG
Orangutan	AUGGG-GAG---UCAGGCAGUGG-----UGGA	GAUGGAGA-----GC---CCUGAGCCUCCACU-----CUCCUGGCC-----CCC-----AG
Rhesus	AUGGG-GAG---UCAGGCAGUGG-----UGGA	GAGGGA---A-----GC---CCUGAGCCUCCACU-----CUCCUGGCC-----CCC-----AG
Baboon	AUGGG-GAG---UCAGGCAGUGG-----UGGA	GAGGGA---A-----GC---CCUGAGCCUCCACU-----CUCCUGGCC-----CCC-----AG
Marmoset	AUGGG-GAGGAGUCAGGUGUGG-----UGGA	GAGGGA---AG-----GC---CCUGAGUCCACU-----CUGCGGUC-----CCC <u>CUUGCUC</u> AG
Mouse_lemur	UUGGG-GAC---AUA---AGCCG-----UG	UGUGGAAGGA-----GC---CCUGAACCUGACU-----UCCUGGCC <u>UUCUCG</u> ---CCC-----AG
Bushbaby	CUGGG-GAC---AUA---AGCAG-----UG	UGUGUGUGUA-----GC---CCUGAACCUGACU-----CUUUGGCC <u>UACUCA</u> ---CCC-----AG
TreeShrew	AGGGG-GCG---CUGGGCGUGGUGUCUGCAGGGGGCGG	GAGUGGAGA-----GC <u>UGGG</u> CCUGAGCCUCCUCU-----CUC-----C---CGC-----AG
Mouse	GAGGG-GCA---UGAGGUGAAGCC---GGGAGU---GGG	GGACAGUA---AA---UCUGAAACGGUGA-----CUACU---CCUUGCCU---CUC-----AG
Rat	GUGGG-GUG---UGAGGCAGGAGC-----GAG	GGACAGUC---AU---CCGAAACUAGCA---UUACU---CCUACCC---CUC-----AG
Kangaroo_rat	GUGGGUACU---UGAAGCAGCAGAUACGGGGGAGA---GGG	GGACAG---GG---CCUGAACCUGGCCU-----CUCCUGGCC <u>CCACCCA</u> CUC-----AG
Squirrel	GUGAGGACC---UGAAGCACAGUUGCCUGGAGC---GAG	GAGCAG---GG---ACGAAUCUUAUCU---CUGCUGCCCU---CCC-----AG
Dolphin	--GGG-AUG---UA---UGUGAGGUGUCGGGAGG---GAG	GGGGCCU---GG---CUGAACCUCUCUGGGCCCUCCUG---CC-----AG
Cow	--GGG-ACA---GA---CAUGAGGUGUCUGAAGG---GAG	GGGCCU---GA---CCUGAACCUCUGGGUUCUCCUG---CC-----AG
Dog	--GGG-AUG---UGAGGCAGCAGC-----GGAG	GAGGAUGGCCU---GG---CCGAAACCACACU---CUCCUGGC---CC-----AG
Microbat	--GGC-ACA---GGAAACAGUUGUG-----G	GAGGGGGCCU---GG---CCUGAACCUGACU---CACCGGC---CC-----AG
Megabat	--GGG-ACA---UGAGGCAGCUGGUGGGGGAGA---GAG	UGGGCCU---GG---CCUGAGCCUCUCU---CUCCGGC---CC-----AG
Hedgehog	--GGG-AGA---GUGGACGGGCUGCA---GGUGA	CGGUCCUGGCCU---GA---CCUAAACCACAA---UCCCUUGC---CC-----AG
Elephant	--GGG-GUG---GGGUUGGU-----GGC	UGCAGCCAA---GC---CCUGAUCACUG-G---CACCUGC---CUC-----AG
Tenrec	--GAG-GCG---GAGGUCAG-----GAC	UGCAGGCCA---GU---CCUGACUGCCCG---CGCCUGCC---CUC-----AG
Armadillo	--CGC-CGG---GGGACGGUCUCCC-----GCC	AGCGCA---C---CCUGAACCAC---A---CGCGCUC---CCC-----AG
Opossum	--GG-GAG---CUUUGUGGCC-----UGG	GGAGGGCAACCCUUU---CCCAAGCCCGACU---CCUU---CUU-----AG
Wallaby	AGGGG-GCC---ACAGGUUGGC-----AAG	CGAACUC---CU---UUGAAGACCCUG---UUUCUU---UU-----AG
Platypus	CCGGG-CAA---ACAACGGUGC-----UG	UUAUCUGAUC---G---GGCGUCCAUC---UCGGU---CC-----AG

hsa-mir-877

Human	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Chimp	GU-AGAGGAGA----U--GGCGCAGGGGACA	GGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Gorilla	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Orangutan	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Rhesus	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Baboon	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Marmoset	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Mouse_lemur	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Mouse	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Rat	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Kangaroo_rat	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Guinea_Pig	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Squirrel	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Rabbit	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Pika	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Alpaca	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Dolphin	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Cow	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Horse	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Cat	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Dog	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Megabat	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Hedgehog	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Shrew	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Elephant	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Rock_hyral	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Tenrec	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Opossum	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Medaka	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG
Zebrafish	GU-AGAGGAGA----U--GGCGCAGGGGACA	CGGGCA--AAG---A-CUUG-----GGGGUUCUGGGACCCUCAGACGUG	UGUCCUCUUCUCCUCCUCCUCCAG

uc002nhg.3

Human	CCAGGG--U---GGGAUG---AGGCUUGGGAAAAAUAGAAGCAGCCCUCUUGGCCUCAC--CC-UCUCUAG
Chimp	CCAGGG--U---GGGAUG---AGGCUUGGGAAAAAUAGAAGCAGCCCUCUUGGCCUCAC--CC-UCUCUAG
Orangutan	CCAGGG--U---GGGAUG---AGGCUUGGGAAAAAUAGAAGCAGCCCUCUUGGCCUCAC--CC-UCUCUAG
Rhesus	CUGGGG--U---GGGAUG---AGGCUUGGGAAAAAUAGAAGCAGCCUCUUGGCCUCAC--CC-UCUCUAG
Baboon	CUGGGG--U---GGGAUG---AGGCUUGGGAAAAAUAGAAGCAGCCUCUUGGCCUCAC--CC-UCUCUAG
Marmoset	CCAGGG--U---GGGAUG---AGGCUUGGGAAAAAUAGAAGCAGCCCUCUUGGCCU---CC-UUCUCUAG
Bushbaby	CUGAGG--U---GGGAUG---AGGCAU-GAAAGAAUAGAACAUCCUCUUGGCCUC--GG-UCCCUCAG
Squirrel	CGCAGC--C---AAUA-G---ACCCCG-----C---CCUCUUGGCC-UC--UGGUCACAG
Dolphin	CCGAAG--U---GGGAGG---AGGCUGGAA-----ACC---CCUCUUGCCAUUCCUG-UC---CAG
Cow	CUGAAG--UGGAAGGGAG---AAGCGUGGAAAGUAAUAGAAAGCCGCCCCUGCCAAUCCGUG-UC---CAG
Cat	CUGAGGA-C---GGGAGG---AGCAUGGAAAGGAUAGAAACCCUCCUGUGUCCGCUU--GG-UC---CAG
Dog	CUGGGGGUG---GGGGG---AAGCAUAGAAAGCAUAGAAACUCCUCCUGUCCACUU--CG-UC---CAG
Megabat	CUGAGG--U---AGGAGG---AGGCAUGGAAAGAAUAG-AAACAUCUUCUUGUCCAUUU--UG-UC---CAG
X_tropicalis	CCUAGA--U---UGAUUCAAAAUAUGGAGACAUA---AAAU-UUCUUGUUCUUAU---UUCUCUAU

uc002rji.2

Human	UACCC---GGAGGCUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Chimp	UACCC---GGAGGCUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Gorilla	UACCC---GGAGGCUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Orangutan	UACCC---GGAGGCUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Rhesus	UACCU---GGAGGCUGGAUG----AUCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Baboon	UACCU---GGAGGCUGGAUG----AUCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Marmoset	GACCU---AGAGACUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Bushbaby	GACCU---GAUCCCGAAGC---A-UGUUGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
TreeShrew	GGCCU---GGAGGCUGGAUG----CUGUCCAUGGGUGUAU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Mouse	AGCCG---CGGGC---GGAUG----UCGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Rat	AGCCGGGUUGGGCUGGAUG----UUGUCUUGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Kangaroo_rat	GGCUG---GGAGGCUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Guinea_Pig	GGGCU---GGAGCCUGAUG----AUGCUUGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Squirrel	GGCCU---AUAGCCUGGAUG----GUGUUGAGGUAU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Rabbit	GGCC---GGAGGCUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Pika	GGCCG---UCUGGGUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Alpaca	GGCC---AGAGGCUGGAUG----A-UGUCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Dolphin	GGCU---GGAGGCUGGAUG----A-CGUCAGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Cow	GGCU---GGAGGCUGGAUG----G-CAUCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Horse	GGCU---GGAGGCUGGAUG----A-UGUCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Cat	GGCU---GGAGGCUGGAUG----C-GUCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Dog	GGCU---GGAUGCUGGAU----A-AGUCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Microbat	GGCU---GGAGGAU----GGCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Megabat	GGCU---GGAGGAU----GUCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Hedgehog	GGCG---GGAGCUGGGC---C-UGUCCUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Elephant	GGGCU---GGAGGCUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Rock_hyrax	GGGCA---GGAGGCUGGAUG----AUGCUUGGGGGAAAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Tenrec	---GCU---GGAGG-UGGAUGGGACGCGCUCAUGAGUGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Armadillo	GGGUG---GGAGCUGGGC---GGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Sloth	GGGCC---AGAGGCACCGG---GUAUCCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Opossum	GC---AGAGCACAAGUG----AGGCUCAUGGGUGAGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Wallaby	UGC---AGAGCUGAGUG----A-----AUCUCUGU-----GUGAACAAACUCAGC- UAAGC---U---CCCUGCC---UCCUG---UAG
Platypus	GGGCG---GGGGGGGGGG---UGGUUCUGGGGGGUGCCCGUGACGGUACCGCGCCUGCCSA-U---GC---GUCUGC---GCG---CAG

uc003atr.19

Human	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Chimp	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Gorilla	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Orangutan	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Rhesus	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Baboon	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Marmoset	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Mouse_lemur	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Mouse	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Rat	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Kangaroo_rat	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Guinea_Pig	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Squirrel	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Rabbit	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Pika	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Dolphin	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Cat	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Dog	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Microbat	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Megabat	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Hedgehog	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Shrew	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Elephant	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG
Wallaby	GUGGCCUGGCCCC--AG---GUUGGGGG-----GA-----C--A-----CGGG--UGG--GUCC-CG-----GCA----CC-CCUCCCCUGACCACCGUGCC--UCU-----CCCAG

uc004bvw.9

Human	GUGUGGAGGGAA	U GGGGGCUAUG	UGAG GG	AGCAGGGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Chimp	GUGUGGAGGGAA	U GGGGGCUAUG	UGAG GG	AGCAGGGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Gorilla	GUGUGGAGGGAA	U GGGGGCUAUG	UGAG GG	AGCAGGGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Orangutan	GUGUGGAGGGAA	U GGGGGCUAUG	UGAG GG	AGCAGGGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Rhesus	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AA	C UCC	CCUU	UUC	UCCCAG
Baboon	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Marmoset	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Mouse_lemur	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
TreeShrew	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Mouse	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Rat	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Kangaroo_rat	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Guinea_Pig	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Squirrel	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Rabbit	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Dolphin	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Cow	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Horse	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Cat	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Dog	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Microbat	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Megabat	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Elephant	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Rock_hyrax	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Tenrec	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Armadillo	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Wallaby	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG
Platypus	GUGUGGAGGGAA	U GGGGGCUAUG	GAG GG	AGCA GGCUG	GGG	UCCC	GGGA	CU AAG	C UCC	CCUU	UUC	UCCCAG

uc011maw.1

Human	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GORGU--CG--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Chimp	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Orangutan	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Rhesus	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Baboon	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Marmoset	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Tarsier	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Mouse_lemur	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Bushbaby	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
TreeShrew	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Mouse	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Rat	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Kangaroo_rat	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Guinea_Pig	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Squirrel	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Rabbit	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Dolphin	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Cow	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Horse	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Dog	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Megabat	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Hedgehog	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Elephant	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Rock_hyrax	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG
Tenrec	GUCAGUGGGAAGCCAGGGC-ACG	CAGGAGGAGCUC-CACA	GAGGU--GAGGGAA--CCACG--	AUCUGA	GCCCGUCC	-UCCCG--	CAG