

		4,650	4,660	4,670	4,680	4,690	4,700	4,710	4,720	4,730
Homo sapiens - Exon3			1 4	13	22	32	42	52	64	
Frame 3			AAACCCACCATG	GCATATGCTCG	TTGCAAGGAGAG	GACTCCGGTGGT	TCATCACTGG	GAGTTGG		
			T H H	G I C S R	L C K E I S	D S V V L A	V			
FINI Manis pentadactyla - NW_023456429.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I C C R	P K E S G S G	G V L S T G	* V K O		
REV gnl SRA SRR9018583.184105710.2			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I C C R	P K E S G S G	G V L S T G	* V K O		
REV gnl SRA SRR9018583.115175431.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I C C R	P K E S G S G	G V L S T G	* V K O		
REV gnl SRA SRR9018583.341982294.2			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I C C R	P K E S G S G	G V L S T G	* V K O		
FINI gnl SRA SRR9018583.27738195.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I C C R	P K E S G S G	G V L S T G	* V K O		
REV gnl SRA SRR9018583.1067232.2			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I C C R	P K E S G S G	G V L S T G	* V K O		
REV gnl SRA SRR3932363.46970871.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I Y C R	P K E S G S G	V V L S T G	* V K O		
REV gnl SRA SRR3932363.14284377.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I Y C R	P K E S G S G	V V L S T G	* V K O		
REV gnl SRA SRR3932364.152507012.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I Y C R	P K E S G S G	V V L S T G	* V K O		
REV gnl SRA SRR3932363.55972235.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I Y C R	P K E S G S G	V V L S T G	* V K O		
REV gnl SRA SRR3932366.86092213.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I Y C R	P K E S G S G	V V L S T G	* V K O		
REV gnl SRA SRR3932366.149441782.1			AAACCCACCATG	GCATATGCTCG	GCCCAAGGAGAG	GGCTCAGGGTTC	ATCACTGG	GTGAGTAAAGG		
Frame 3			P F Y F L E	T H H V	G I Y C R	P K E S G S G	V V L S T G	* V K O		

Phataginus tricuspis:

	5,770	5,780	5,790	5,800	5,810	5,820	5,830	5,840	5,850	
			1	7	15	25	35	45	55	64
Homo sapiens - Exon3			AAACCCACCA		GGCATA	GCCTCGT	TGTGCAAGGAGAGT	GCATCCGGTGGT	TCTGGCAGT	GG
Frame 3			T H H		G I C S R	L C K L S	S D S V V L	A V		
FMD Phataginus tricuspis - SOZM010018664.1	ACCTTTTATTTTCTAG	AAATCGACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAG	TAG	GTGAGTAA
Frame 3	P F Y F L E M H H			G I C C C H		P K E S G S G S V V L S		S A R	*	V K
REV gnl SRA SRR12437587.179591263.1	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATC		
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S				
FMD gnl SRA SRR12437587.322033917.1	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAG		
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S				
FMD gnl SRA SRR12437587.156893352.2	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATC		
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S				
REV gnl SRA SRR12437587.54505864.1	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCA		
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S				
REV gnl SRA SRR12437587.219232674.2	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAGC		
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S				
REV gnl SRA SRR12437587.219402560.2	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAGC		
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S				
FMD gnl SRA SRR12437587.179591263.2	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAG	TCGGA	TCGGAA
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S		D R		
REV gnl SRA SRR12437587.328550711.1	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAG	TGGT	GGTG
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S		A G		
REV gnl SRA SRR12437587.236019707.1	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAG	TGGT	GGTG
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S		A G		
REV gnl SRA SRR12437587.149474055.1	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAG	TGGT	GAG
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S		A G	*	
FMD gnl SRA SRR12437587.205240896.2	ACCTTTTGTTTTCTAG	AAATCCACCA	AT	GGCATA	GCCTCGT	GCCCAAGGAGAGT	GGCTCGGTGGT	TCTATCAG	TGGT	GAGTA
Frame 3	P F C F L E T H H			G I C C C H		P K E S G S G S V V L S		A G	*	V

SRA Validation of a premature stop codon in exon 6 of *Awat1*:

Manis javanica:

[illegible]

Manis pentadactyla:

	7,020	7,030	7,040	7,050	7,060	7,070	7,080	7,090	7,100	7,110
Homo sapiens - Exon6 Frame 2	53	63	73	83	93	103	113	122	131	141
	GGTGGTGTCCATAAAGGATAGCAGGATGTACAAGTCCAGAGCTGTCGCGGTATCTTTGGTCTACCTGTGTGTCTCTATGGACAA									
	V L F H K D S R M Y K F Q S C F R R I F G F Y C C V F Y G Q									
FWD Manis pentadactyla - NW_023454910.1 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
FWD gnl SRA SRR9018653.292179470.2 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
REV gnl SRA SRR9018653.60630561.1 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
FWD gnl SRA SRR13167976.693718820.2 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
REV gnl SRA SRR13167976.387096692.1 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
REV gnl SRA SRR13167976.628181191.1 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
FWD gnl SRA SRR13167976.625701880.2 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
FWD gnl SRA SRR13167976.625691042.2 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
FWD gnl SRA SRR9018653.268041090.2 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
REV gnl SRA SRR9018653.180492193.2 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
FWD gnl SRA SRR13167976.652005952.2 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									
FWD gnl SRA SRR9018653.74732644.1 Frame 2	GGTGTGTGTCCATAAAGGACAGCTGGATGTACAAGTCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT									
	V L F H K D S W M Y K F Q C L * D I I F G Y F - Y F L - D N Y F									

Phataginus tricuspis:

	5,410	5,420	5,430	5,440	5,450	5,460	5,470	5,480	5,490
Homo sapiens - Exon6 Frame 2	58	68	78	88	98	108	118	128	138
	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD Phataginus tricuspis - SOZM010039185.1 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.146734430.2 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.146563318.2 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.146569073.2 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.350769925.2 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.64274513.1 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.15874471.1 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.103520156.2 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.10529417.2 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.149487049.2 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.149479997.2 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								
FWD gnl SRA SRR12437587.178331534.1 Frame 2	AGGTGCTGTTCCTAAGGACAGCAGGATGTACATGTCCCAATGCTCTAAGACATTATCTTTGGCATTTTAAATTTT-AGATAATATTTT								
	V L F H K D S R M Y M S Q C L * G S I F G - * F C V F Y R R								

SRA Validation of an insertion in exon 4 of Awat2 in Manis:

Manis javanica:

	21,400	21,410	21,420	21,430	21,440	21,450	21,460	21,470	21,480	21,49
Homo sapiens - Exon4 Frame 1	43	53	63	73	81	89	99	109	119	129
FW Manis javanica - NW_023436233.1 Frame 1	CGTCTGCCACCCCTCATGGGCCTTGGCCATGGATG	---	---	---	---	---	---	---	---	---
FW gnl SRR9018619.93978022.2 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
FW gnl SRR9018619.126029381.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
REV gnl SRR9018619.43072335.2 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
FW gnl SRR9018619.50405214.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
FW gnl SRR9018619.10891142.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
REV gnl SRR13167977.106866969.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
REV gnl SRR13167977.157062340.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
REV gnl SRR13167977.157069382.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
REV gnl SRR13167977.302059978.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
REV gnl SRR13167977.624286945.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---
REV gnl SRR13167977.423076203.1 Frame 1	TGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---	---

Manis pentadactyla:

	22,030	22,040	22,050	22,060	22,070	22,080	22,090	22,100	22,110
Homo sapiens - Exon4 Frame 1	45	55	65	75	81	91	101	111	121
FW Manis pentadactyla - NW_023457172.1 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATGGATG	---	---	---	---	---	---	---	---
FW gnl SRR13167976.653859738.2 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
FW gnl SRR13167976.694497437.1 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
FW gnl SRR13167976.39077348.2 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
REV gnl SRR13167976.640069953.1 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
REV gnl SRR9018653.66097160.2 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
REV gnl SRR9018653.136921887.2 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
FW gnl SRR9018653.217779837.1 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
FW gnl SRR9018653.284859427.2 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
FW gnl SRR13167976.628156416.2 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
FW gnl SRR13167976.185410337.2 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---
FW gnl SRR13167976.506105660.1 Frame 1	ACATCTTGTCTGCCACCCCTCATGGGCCTTGGCCATTCATAC	---	---	---	---	---	---	---	---

SRA Validation of a deletion in exon 4 of *Awat2* in *Phataginus tricuspis*:

[illegible]

SRA Validation of a deletion in exon 2 of *Dgat2l6* in Manis:

Manis javanica:

	590	10,600	10,610	10,620	10,630	10,640	10,650	10,660	10,670	10,680
Homo sapiens - Exon2 Frame 3	:1	41	51	61	71	79	89	99	111	
	TCTGGTATTCAGTAAGTTTGCCCTTGGCTGTGCTCCTCG	--	AGCCCTGGCTCACCATGATGATTGGAAACCCCACAGTCAAG							
	L L F S K F W P L A V L S L	--	A W L T Y D W N T H S Q							
FIND Manis javanica - NW_023436233.1 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.680398849.2 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.680359710.2 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.406260491.2 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.241712036.2 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.239181515.1 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.633482776.2 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
FIND gnl SRA SRR9018619.57801290.1 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.204740324.1 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.74581311.1 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.204755517.1 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							
REV gnl SRA SRR13167977.136550542.1 Frame 3	TCTGGTGTCTACTAAATTTGGACCTTATCATGCTGTGCT		TAGCCCTGGCTGCCTATGATTGGAGCCCCACATTCAAG							GTTAAGAGAC
	L V F T K F W T S M C F		A W L A Y D W S T H I Q G K R							

Manis pentadactyla:

	6,090	6,100	6,110	6,120	6,130	6,140	6,150	6,160	6,170	6,180
Homo sapiens - Exon2	31	41	51	61	71	79	89	99	111	
Frame 3	CTGTTATTCAGTAAGTCTGGCCCTGGCTGTGCTCCCTC	AGCCCTGGCTGCCTATGATGGGAACACCCACAGTCAAG								
FIND Manis pentadactyla - NW_023454910.1	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
REV gnl SRA SRR9018653.167184351.1	CTGGGTTTCACTAAGTCTGGCCCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
FIND gnl SRA SRR9018653.73950546.2	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
FIND gnl SRA SRR9018653.56696012.1	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
REV gnl SRA SRR9018653.164520795.1	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
FIND gnl SRA SRR9018653.259267310.1	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
REV gnl SRA SRR13167976.435744091.2	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
REV gnl SRA SRR13167976.591007923.2	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
REV gnl SRA SRR9018653.97700248.1	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
REV gnl SRA SRR13167976.21394714.1	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
REV gnl SRA SRR9018653.146773618.2	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								
FIND gnl SRA SRR9018653.89658579.2	CTGGGTTTCACTAAGTCTGGACCTATTCATGCT	AGCCCTGGCTGCCTATGATGGGAACACCCACATTCATG								
Frame 3	FVFTKFWTLSMLC	AWLLAYDWSTTHIHGK								

SRA Validation of an insertion in exon 2 of *Dgat2l6* in *Phataginus tricuspis*:

[illegible]

Manis javanica:

Manis pentadactyla:

[illegible]

SRA Validation of an insertion in exon 3 of *Eda2r* in *Phataginus tricuspis*:

	6,630	6,640	6,650	6,660	6,670	6,680	6,690	6,700	6,710
Homo sapiens - Exon3		12	12	20	30	40	50	60	70
Frame 2		G T T C T A C C G A A A G A		T A C G C A T T G G A G G C C T G C A G G A C C A A G A G T G C A T C C C G T G C A C G A A G C A G A C C C C C A C C					
		F Y R K		R I G G L Q D H E C I P C T K Q T P T					
Phataginus_tricuspis - SOZM010132249.1									
Frame 2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
REV gnl SRA SRR12437587.354496875.2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
REV gnl SRA SRR12437587.135018194.2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
REV gnl SRA SRR12437587.92649864.1		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
REV gnl SRA SRR12437587.92638782.1		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
Phataginus_tricuspis - SOZM010132249.1									
Frame 2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
REV gnl SRA SRR12437587.302514892.2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
REV gnl SRA SRR12437587.96689258.1		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
REV gnl SRA SRR12437587.29521617.1		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
REV gnl SRA SRR12437587.70962093.2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
Phataginus_tricuspis - SOZM010132249.1									
Frame 2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
REV gnl SRA SRR12437587.352790646.2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					
Phataginus_tricuspis - SOZM010132249.1									
Frame 2		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
REV gnl SRA SRR12437587.66044030.1		ATTGCTCTGACCACAGGTTCTACAAAAATAA		TACGTAATTGGAGGCCTGCAGGACCACGAGTGCATCCCATGCACAAAGTGGGCCCCCAACC					
Frame 2		Y C S D H R F Y K N K		T R I G G L Q D H E C I P C T K W A P T					

SRA Validation of a deletion in exon 2 of *Fabp9* in *Manis*:

Manis javanica:

	3,840	3,850	3,860	3,870	3,880	3,890	3,900	3,910	3,920
Homo sapiens - Exon2		99	109	119	129	139	149	159	173
Frame 3		A A G T C T T T C C A G G A C A C T A A G A T C T C C T T C A A G C T G G G G G A A G A A T T T G A T G A A A C T A C A G C A G A C A A C C G G A A A G T A A A G							
		S S F Q D T K I S F K L G E E F D							
Manis javanica - NW_023436188.1									
Frame 3		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
REV gnl SRA SRR9018619.76805309.1		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR9018619.75484082.2		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR9018619.75472236.2		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR13167977.838201525.1		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR13167977.726525256.2		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR13167977.77338145.1		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR13167977.57507379.2		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR13167977.659193655.1		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR13167977.837342281.1		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR13167977.659152457.1		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							
REV gnl SRA SRR13167977.752168642.2		ICAGTCTTGAAGAACACCTGAGATCTCTCTTAAGCTGGGGGAAGAATTGTGAT							
Frame 3		S L K N T E I F F K L G E E F D							

Manis pentadactyla:

	2,620	2,630	2,640	2,650	2,660	2,670	2,680	2,690	2,700
Homo sapiens - Exon2	101	111	121	131	141	151	161	173	
Frame 3	TTCTTCCTCAGGACACTTAAAGATCTCTTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
	S F Q D T K I S F K L G L G E E F D	T T T A D N R K V K							
FMD M. pentadactyla - NW_023455931.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
FMD gnl SRA SRR9018653.223291637.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
REV gnl SRA SRR9018653.299390348.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
FMD gnl SRA SRR9018653.172447880.2	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
REV gnl SRA SRR13167976.387286606.2	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
REV gnl SRA SRR13167976.437602040.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
REV gnl SRA SRR13167976.437673133.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
FMD gnl SRA SRR13167976.533665250.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
REV gnl SRA SRR13167976.227325058.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
REV gnl SRA SRR9018653.191451221.2	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
REV gnl SRA SRR9018653.280176808.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							
REV gnl SRA SRR9018653.207268691.1	TTTGAAGAACCTGAGATCTTCTCAAGCTGGGGGAAGAAATTGAG	AAACACACAGCAGATAACCTGAAAGTCAAGGTTAAAAATTA							
Frame 3	L K N T E I F F K L G L G E E F D	* T T A D N L K V K V K I -							

SRA Validation of a deletion in exon 1 of *Fabp9* in *Phataginus tricuspis*:

	340	350	360	370	380	390	400	410	420																				
Homo sapiens - Exon1		1	7	17	27	37	47	57	73																				
Frame 1		ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCTGG	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG																				
		M	V	L	P	F	L	G	T	W	K	L	S	S	E	N	F	E	D	Y	M	K	L	L					
FIND P. tricuspidis - SOZM010004921.1		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAAAT																		
Frame 1		L	C	I	M	V	L	P	L	G	T	W	K	H	S	S	E	N	F	E	Y	L	K	Q	L	G	E	K	
REV gnl SRA SRR12437587.340229769.1		CTTTGCAT	CAAGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG																			
Frame 1		L	C	I	K	V	E	P	L	L	G	T	W	K	H	S	S	E	N	F	E	Y	L	K	Q	L	G	E	
FIND gnl SRA SRR12437587.323119154.2		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG																			
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	E	Y	L	K	Q	L	G	E	
FIND gnl SRA SRR12437587.322991690.2		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG																			
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	E	Y	L	K	Q	L	G	E	
FIND gnl SRA SRR12437587.103882981.2		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAA																		
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	D	E	Y	L	K	Q	L	G	E
FIND gnl SRA SRR12437587.269066018.1		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAA																		
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	D	E	Y	L	K	Q	L	G	E
FIND gnl SRA SRR12437587.83058962.1		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAA																		
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	D	E	Y	L	K	Q	L	G	E
FIND gnl SRA SRR12437587.143719965.1		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAA																		
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	D	E	Y	L	K	Q	L	G	E
FIND gnl SRA SRR12437587.63572520.2		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAA																		
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	D	E	Y	L	K	Q	L	G	E
FIND gnl SRA SRR12437587.252896689.1		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAA																		
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	D	E	Y	L	K	Q	L	G	E
FIND gnl SRA SRR12437587.40200485.2		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAA																		
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	D	E	Y	L	K	Q	L	G	E
REV gnl SRA SRR12437587.266475253.2		CTTTGCAT	ATGGT	TGAGCCC	CTCTGGGAAC	CTGGGAAGCA	CCAGTGA	AAATCTTG	GAGTACAT	GAAAGAACTGG	GTGAGAA																		
Frame 1		L	C	I	M	V	L	P	L	L	G	T	W	K	H	S	S	E	N	F	D	E	Y	L	K	Q	L	G	E

SRA Validation of a deletion in exon 3 of *Gsdmb* in Manis:

Manis javanica:

	8,760	8,770	8,780	8,790	8,800	8,810	8,820	8,830	8,840	8,850
Homo sapiens - Exon3			1 4 14 24 34 44 51 61 71							
Frame 2			GAAGCTGAAAGAGGCAAC	TACCCCTTTCATCCGATCAATTAATAC	---	GAGAGAAAACCTGTATCTGGTGACAG				
Frame 2			K L K R	L P F S F R S I N T	---	R E N L Y L V T				
FW M. javanica - NW_023436081.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
FW gnl SRA SRR9018619.101391206.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.431521085.2			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
FW gnl SRA SRR9018619.130223951.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.734494802.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.633381741.2			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.578380851.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.514488938.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.514411242.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.351211323.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.788842112.2			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				
REV gnl SRA SRR13167977.689657121.1			CCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAGT	GAGAAAAGATCTGTCTCTGGTGACAG				
Frame 2			P S T P S R K L K	---	K L P T S L Q S V Q T V R K D	L S L V T				

Manis pentadactyla:

	12,030	12,040	12,050	12,060	12,070	12,080	12,090	12,100	12,110
Homo sapiens - Exon3			1 4 14 24 34 44 51 61						
Frame 2			GAAGCTGAAAGAGGCAAC	TACCCCTTTCATTCCGATCAATTAATAC	---	GAGAGAAAACCTGTATCTGGT			
Frame 2			K L K R	L P F S F R S I N T	---	R E N L Y L V T			
FW M. pentadactyla - NW_023456908.1			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.545822625.2			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.602640822.2			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.152888692.2			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.291811677.1			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.696312890.2			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.67385813.2			AGTGCTCCGTACACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P Y T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.221278009.1			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.266108084.1			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.251301801.2			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
REV gnl SRA SRR13167976.327476634.2			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			
FW gnl SRA SRR13167976.245655731.1			AGTGCTCCGTCCACTCCCTCCAGGAAGTTTGAA	---	AACTACCCACTTTCATTACAGTCAGTTCAGACAAAT	GAGAAAAGATCTGTCTCTGGT			
Frame 2			S A P S T P S R K L K	---	K L P T S L Q S V Q T M R K D	L S L V T			

SRA Validation of a premature stop codon in exon 1 of *Gsdmb* in *Phataginus tricuspis*:

	10,180	10,190	10,200	10,210	10,220	10,230	10,240	10,250	10,260
Homo sapiens - Exon1	110	120	130	140	150	160	170	180	190
Frame 1	TGCTTCCATCTGGTGGGGGAGAAGAACTTCTTGGATGCCGGCACACACAAAGGCCCTCACCCCTGATGGACATCTCGGACACAGATGG								
	C F H L V G F K R T F F G C R H Y T T G G L T L M D I L D T D								
FWD Phataginus tricuspis - SOZM010000065.1	TGCTTAACTCTAGTGAAGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGCTTGCTTGCAGGACATCTGGAGAGAGAGGG								
Frame 1	C L S L V K K R N L F * C R H F R T G F V L Q D I L L E R E								
REV gn SRA SRR12437587.316787320.1:1-31	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCT								
Frame 1	K R N L F * C R H								
REV gn SRA SRR12437587.255911403.1:1-40	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGG								
Frame 1	K R N L F * C R H F R T								
FWD gn SRA SRR12437587.322485290.1:112-151	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGG								
Frame 1	K R N L F * C R H F R T								
FWD gn SRA SRR12437587.156459922.2:111-151	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGC								
Frame 1	K R N L F * C R H F R T G								
FWD gn SRA SRR12437587.259199932.2:75-116	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGCT								
Frame 1	K R N L F * C R H F R T G								
REV gn SRA SRR12437587.247839647.2:36-77	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGCT								
Frame 1	K R N L F * C R H F R T G								
FWD gn SRA SRR12437587.242269794.1:87-128	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGCT								
Frame 1	K R N L F * C R H F R T G								
FWD gn SRA SRR12437587.208309850.2:104-145	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGCT								
Frame 1	K R N L F * C R H F R T G								
FWD gn SRA SRR12437587.200182448.2:13-54	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGCT								
Frame 1	K R N L F * C R H F R T G								
FWD gn SRA SRR12437587.199901726.1:13-54	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGCT								
Frame 1	K R N L F * C R H F R T G								
FWD gn SRA SRR12437587.193669797.1:3-44	AGAAGAGAAATTTATTTCTGGATGCCGGGCACCTCAGGACAGGCT								
Frame 1	K R N L F * C R H F R T G								

SRA Validation of a premature stop codon in exon 3 of *Mogat3* in *Manis javanica*:

	760	770	780	790	800	810	820	830	840	
			1	5	15	25	35	45	55	71
Homo sapiens - Exon3			G	G	A	G	G	C	G	
Frame 3			G	R	R	S	E	W	I	R
						N	R	A	I	W
								R	Q	L
								R	D	Y
								Y	P	V
								K		
FIND Manis javanica - NW_023436195.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
FIND gnl SRA SRR9018619.50859478.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
REV gnl SRA SRR9018619.145393765.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
FIND gnl SRA SRR9018619.19253641.2			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
FIND gnl SRA SRR13167977.662470190.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
FIND gnl SRA SRR13167977.620657937.2			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
FIND gnl SRA SRR13167977.410048514.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
FIND gnl SRA SRR13167977.768836761.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
REV gnl SRA SRR9018619.47639311.2			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
REV gnl SRA SRR13167977.537324835.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
REV gnl SRA SRR13167977.426526810.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
REV gnl SRA SRR13167977.258734569.1			C	A	T	C	T	C	T	G
Frame 3			I	S	L	P	*	G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A
								G	G	A

SRA Validation of a premature stop codon in exon 6 of *Mogat3* in *Manis pentadactyla*:

	2,380	2,390	2,400	2,410	2,420	2,430	2,440	2,450	2,460	2
Homo sapiens - Exon6	51	61	71	81	91	101	111	121	131	
Frame 2	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGCATTTGGTGGCAGTACCCTTCAAGAAAGCTCATGGGCTTCTCTCCCTGCATCTCTTGGGGCT	LKAFATGGSWQYHWCQQLTFKKKLMLGFPSCPCLFWG								
FWO Manis pentadactyla - NW_023454636.1	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLWG								
REV gnl SRA SRR9018653.284385683.2	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLL								
REV gnl SRA SRR13167976.299127888.2	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
REV gnl SRA SRR13167976.647120293.1	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
REV gnl SRA SRR13167976.609257599.1	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
REV gnl SRA SRR13167976.345466453.2	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
REV gnl SRA SRR9018653.94797896.2	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
FWO gnl SRA SRR9018653.288913687.2	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
FWO gnl SRA SRR9018653.288914231.2	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
REV gnl SRA SRR13167976.192730967.2	TAATTAATGATTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	INDFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
REV gnl SRA SRR13167976.171786720.1	CCTTAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	LKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								
REV gnl SRA SRR13167976.417258506.2	TAAAGGCTTTGCCAAGCAGTCTCCGGCAGTATCTCTGGTGTAGATCACCTTCAAGAAATGTGGGGCTTCTCCCTGCATCTCTTGGGGCT	YKAFATDTSWQYLLC*ITTFKKKC VGFSPPCLLW								

SRA Validation of a premature stop codon in exon 4 of *Mogat3* in *Phataginus tricuspis*:

30 1,770 1,780 1,790 1,800 1,810 1,820 1,830 1,840 1,850

0 120 130 140 150 160 170 180 190

Homo sapiens - Exon4
Frame 1

REV Phataginus tricuspid - SOZM010007253.1
Frame 1

FluID gnl|SRA|SRR12437587.47569843.1
Frame 1

FluID gnl|SRA|SRR12437587.99643688.1
Frame 1

FluID gnl|SRA|SRR12437587.141116165.2
Frame 1

Sequence alignment showing nucleotide differences (A, C, G, T) and gaps (S, Q, R, F, V, A, G, L, A, S, L, F, Y, P, V, F, R, D, Y, L, W, S, G, --E, P, *) across the specified genomic region. A red box highlights a specific region of interest.

SRA Validation of a deletion in exon 1 of *Slurp1* in *Phataginus tricuspis*:

	930	940	950	960	970	980	990	1,000	1,010	1,020
Homo sapiens - Exon1				1	9	19	29	39	49	58
Frame 1				ATGGCCTCTCGGGGCGGCAGCTGCTGCTGGCAGCCGGAGCATGGGCTGTG						
Frame 1				M A S R W A V Q L L L V A A W S M G C						
Phataginus_tricuspis - SOZM010015272.1				ATCCCTGCTCCCGGGCACTGAGGAGCAGCCCTTCACAGCCCTGCTGTGTGGCTTGTGGCAGCCCTCCAGCTTGTGCTCTGGTGAGTAGGGCA						
Frame 1				I P A P G H * G A A P S Q P L L L W L V A A S S L C S G E * G						
gnl SRR12437587.268592436.2				CTCCCGCTCCCGG-CACTGAGGAGCGGCCCTTCACAGCCCTGCTGTGGGCTCGTGGCAGCCCTCCAGCTTGTG						
Frame 1				S P R S R - H * G A A P S Q P L L L G L V A A S S L						
gnl SRR12437587.176892788.2				CTCCCGCTCCCGG-CACTGAGGAGCGGCCCTTCACAGCCCTGCTGTGGGCTCGTGGCAGCCCTCCAGCTTGTGCTCTGGTGAG						
Frame 1				S P R S R - H * G A A P S Q P L L L G L V A A S S L R S G E						
gnl SRR12437587.206003755.1				CTCCCGCTCCCGG-CACTGAGGAGCGGCCCTTCACAGCCCTGCTGTGGGCTCGTGGCAGCCCTCCAGCTTGTGCTCTGGTGAGTAGGGC						
Frame 1				S P R S R - H * G A A P S Q P L L L G L V A A S S L R S G E * G						

SRA Validation of a deletion in exon 2 of *Tchhl1* in *Manis*:

Manis javanica:

	2,290	2,300	2,310	2,320	2,330	2,340	2,350	2,360	2,370
Homo sapiens - Exon2		1,362	1,372	1,382	1,392	1,402	1,412	1,422	1,432
Frame 1		GAACACAAGATTTAGCACCACTTGAGAAGCAGTCTGTAGGAGAGAACTACTAGGGTCACCAAGACTCATGACCAACCAGTTGAGGAGGAGCA							
Frame 1		R T Q D L A P L E K Q S V G E N T R V T K T H D Q P V E E E I							
Manis javanica - NW_023436233.1		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGGTCACCAAGACTCATGACCAACCAGTTGAGGAGGAGCA							
Frame 1		G I K E M A P L E N V F G K E K R V T K T H D K P I K E D I							
gnl SRR13167977.257310349.2		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGG							
Frame 1		G I K E M A P L E N V F G K E K R							
gnl SRR9018619.131038237.2		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGATCA							
Frame 1		G I K E M A P L E N V F G K E K R I							
gnl SRR9018619.147107880.1		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGATCACCA							
Frame 1		G I K E M A P L E N V F G K E K R I T							
gnl SRR9018619.110371229.1		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGATCACCAAG							
Frame 1		G I K E M A P L E N V F G K E K R I T K							
gnl SRR13167977.172363079.2		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGGTCACCAAGAC							
Frame 1		G I K E M A P L E N V F G K E K R V T K							
gnl SRR13167977.788149186.2		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGGTCACCAAGAC							
Frame 1		G I K E M A P L E N V F G K E K R V T K							
gnl SRR13167977.443536136.2		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGGTCACCAAGACTC							
Frame 1		G I K E M A P L E N V F G K E K R V T K K T							
gnl SRR13167977.330689049.2		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGGTCACCAAGACTC							
Frame 1		G I K E M A P L E N V F G K E K R V T K K T							
gnl SRR13167977.131517069.2		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGGTCACCAAGACTC							
Frame 1		G I K E M A P L E N V F G K E K R V T K K T							
gnl SRR13167977.443559900.2		GAATAAAGGAGATGGCACCACTTGAAAACGTGTTTGGAAAAGAGTAAGAGGGTCACCAATACCTG							
Frame 1		G I K E M A A L E N V F G K E K R V T N T							
gnl SRR13167977.66632150.2		GAATACAGGAGATGGCACCACTTGTAACGTGTTTGGAAAAGAGTAAGAGGGTCACCAAGACTC							
Frame 1		G I Q E M A P L E N V F G K E K R V T K K T							

Manis pentadactyla:

		2,320	2,330	2,340	2,350	2,360	2,370	2,380	2,390	2,400
Homo sapiens - Exon2		1,365	1,375	1,385	1,395	1,405	1,415	1,425	1,435	1,445
Frame 1		AAGATTTAGCACCATGTGAGAAGCAGTCTGTAGGAGAA	TACTAGGGTCACCAAGACTCATGACCAACCACTGTAGGAGGAGGATGGT							
FMD Manis pentadactyla - NW_023454669.1		GGGAGATGGCACCATGTGAAAACCTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACCAACCACTCAAGGAGGACATGGT							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDKPIKEDNIG							
REV gn SRA SRR9018653.250151148.1		GGGAGATGGCACCATGTGAAAACCTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACA							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDK							
FMD gn SRA SRR9018653.249594813.2		GGGAGATGGCACCATGTGAAAACCTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACAA							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDK							
REV gn SRA SRR13167976.663063033.1		GGGAGATGGCACCATGTGAAAACCTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACAAG							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDK							
REV gn SRA SRR13167976.166557408.1		GGGAGATGGCACCATGTGAAAACCTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACAAG							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDK							
REV gn SRA SRR13167976.166550518.1		GGGAGATGGCACCATGTGAAAACCTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACAAG							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDK							
REV gn SRA SRR13167976.122739828.2		GGGAGATGGCACCATGTGTTTGGAAAGAGC	GAGAGGGTCACCAAGACTCATGACCAAGCCCAATCA							
Frame 1		KEMAYAPLLENLVGGKPE	KRVVTKTHTDKPI							
REV gn SRA SRR13167976.467085158.2		GGGAGATGGCACCATGTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACCAAGCCCAATCA							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDKPI							
REV gn SRA SRR13167976.684349474.1		GGGAGATGGCACCATGTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACAAGCCCAATCA							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDKPI							
REV gn SRA SRR13167976.707413249.2		GGGAGATGGCACCATGTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACCAAGCCCAATCA							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDKPI							
REV gn SRA SRR13167976.467092804.2		GGGAGATGGCACCATGTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACCAAGCCCAATCA							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDKPI							
REV gn SRA SRR13167976.157509247.1		GGGAGATGGCACCATGTGTTTGGAAAGAGC	AAGAGGGTCACCAAGACTCATGACCAAGCCCAATCA							
Frame 1		KEMAYAPLLENLFGGKPE	KRVVTKTHTDKPI							