

Locus	Genbank Sequences used for probe design	Forward Primer	Reverse Primer	Size	Annealing T	Platypus BACs identified	Wallaby BACs identified
IGF2	AF225876	5'-GGCATCGTGGAGGAGTGTTC	5'-CTCGGACTTGGCAGGGGT	81bp	60°C	2	10
IGF2R (platypus) IGF2R (wallaby)	AF151172	5'-GGACACATCACCACCAAGTG	5'-CATTCCTTCTGGCCATTGAG	224bp	55°C (40 cycles)	10	8
	AF339159	5'-GCACAGTTCCTAAGCTTACTGC	5'-TTTGGGTGAGAGGGTTAAGG	156bp	55°C		
DIO3	NM_001362 AF426023 U24282 XM_426465	5'-GCAGCTGTACCTGACCACCG	5'-GACCCAGCCGTCGGATGGGTG	128bp	60°C	15	6
GRB10	XM_376609 NM_010345	5'-GTCTTTAGTGAAGATGGGAC	5'-GTCCAGCTGTTGTATCCAC	116bp	55°C	19	15
GNAS	NM_000516 BC080816 NM_019132 XM_417485	5'-TCATCTTCGTGGTGGCCAGC	5'-GTTCCAGATGCTCTTGAAGAG	104bp	50°C (40 cycles)	9	18
UBE3A	NM_000462 NM_011668 XM_416882	5'-GCGAGCAGCTGCAAAGCATC	5'-CCTTTCTTGGAGGGATGAGG	198bp	60°C	7	
SLC38A4	NM_018018	5'-GTGATTTACAAGAAATTCCA	5'-CGGGAGTTGAATACAAAAGTA	275bp	55°C	10	
DLK1 (Wallaby) DLK1 (Platypus)	TI_395847291	5'-CTTGTTGAAGAAAACAATGC	CCAGGCCATCTGCTTACCA	81bp	55°C		13
	TI_752207707	5'-ACAGGGCCCTTCTAAGAT	5'-ACTCACCTTGCTCTGCAAC	129bp	55°C	15	
MRPL23 CD81	NM_021134	5'-GTACCCCTGTACCGGCTGGG	CCATGGGGATCCGGAAGTGCAC	122bp	60°C		19
	NM_004356	5'-CATGGGAGTGGAGGGCT	5'-GTCCGGGTCACTTAGGGG	767bp		5	

Table S1 – Sequences and PCR primers used to generate probes for each gene studied.

For DIO3, GRB10, GNAS and UBE3A primers were designed to the well conserved regions in the mouse sequence. All other probes were designed to the sequence in column 2. The number of Platypus and Wallaby BACs identified are shown in columns 7 and 8.