

Primers name	Sequence	Target gene	Tm	Fragment length	Primers name	Sequence	Target gene	Tm	Fragment length
IG1F	GAGCTGATGTCCTTCAGTCT	nocyr_0049	61	1478	IG13F	GAACCTTTTCAGGACGTGCTC	nocyr_2868	61	1365
IG1R	CTATCCGGCGGTGATTACTAC	nocyr_0050			IG13R	GAGACATCATCTCTACTGAC	nocyr_2869		
IG1rtF	TCGAGCGCGCTGCCACGGGAGAG	nocyr_0063	63	492	IG13rtF	GCGCGGACACCAATA	nocyr_2882	63	1035
IG1rtR	CGAACGGGCTGGGCATGACGAACC	nocyr_0064			IG13rtR	GGAATGCAGCGATTAATAGTCAT	nocyr_2884		
IG21tF	GTTATCCGGGTCTGCTGCAC	nocyr_0181	61	2660	IG141tF	GCACACGCGCACTCGGTCTCCA	nocyr_2932	63	859
IG21tR	GTTTCGACGTGCGTTATCTGCG	nocyr_0183			IG141tR	CGTCGGCGGCTCTGAAGC	nocyr_2934		
IG2F	GAAGGCCACTAAAGTTCTCG	nocyr_0197	61	1573	IG14F	GAGCTCACTTCATTGACCAG	nocyr_2962	61	1220
IG2R	GCTGTCTTTCGCTCTGATTC	nocyr_0200			IG14R	GATCAAGATTATGGGCAGCG	nocyr_2963		
IG2rtF2	GCTGCGGTGGCCGAGGCTATTAC	nocyr_0204	63	1423	IG14rtF	GGACCGCGGATGCAAGGAAACTGG	nocyr_2985	63	1185
IG2rtR2	GTCAATCCGGATCTGGGAACACAG	nocyr_0206			IG14rtR	AGGTGCTCGCGCGATACGGCTACA	nocyr_2986		
IG31tF	CGACGGCGCACACCTCGACAT	nocyr_0299	63	729	IG151tF	CTGTCTTGGCGCGCTCATGATGG	nocyr_3905	63	523
IG31tR	CTGGCCCTGGTTCGGTCGGGAAGTG	nocyr_0300			IG151tR	CCTGGTCCGGCTCGCATCTCTCG	nocyr_3906		
IG3F	CGATCAAGTTCGCCGACTTC	nocyr_0300	61	1583	IG15F	CATCACTCTCTCGTTGTTCG	nocyr_3909	61	1573
IG3R	CGATCTCGATCCGGATCTTG	nocyr_0301			IG15R	CGAAGCTGATCCAGAATTG	nocyr_3910		
IG3rtF	CGGTGCGCGGGCTGGAAGAT	nocyr_0308	63	800	IG15rtF	TCGCCGGGATGTTGTCCAC	nocyr_3911	63	616
IG3rtR	TCCGGGCCCGCACTGTTGTAAGC	nocyr_0310			IG15rtR	AGCCGGGCTGGGTCACT	nocyr_3912		
IG41tF	GACGCGGTGCTGGGCGAATCGTT	nocyr_0339	63	673	IG161tF2	GCGCGACGATCTTGAGGTTCTTAC	nocyr_3939	63	1415
IG41tR	CGCGGGCTTGCGCCAGTTATCC	nocyr_0440			IG161tR2	CGAAACTCCAGCCCCGAGATACC	nocyr_3940		
IG4F	GAAGTTTCACTTTGCGCAAC	nocyr_0342	61	1414	IG16F	GAAAGGTGTTCTATTGCGTGC	nocyr_3941	61	1235
IG4R	CGTTGGTGTTCGTGAACATG	nocyr_0344			IG16R	GCACCCGAGTTCGATCAGAAC	nocyr_3943		
IG4rtF	GTGCGCAACAGGGTCGAATAGAAC	nocyr_0382	63	699	IG16rtF	ACGGGCGGGGACGCTCTCGT	nocyr_3962	63	859
IG4rtR	CCACCGGGGCACTTCCCAATA	nocyr_0384			IG16rtR	CGCCGCGAGCGGAAACACT	nocyr_3963		
IG51tF	TCATCCCGCTCTTCGCCCTCCTCA	nocyr_0471	63	788	IG171tF	ACGAGCCCAGTAGATGCCCTTGAC	nocyr_4001	63	764
IG51tR	GCCCCACTTGCCGATCCCCCTTGTC	nocyr_0473			IG171tR	ATGTGTCGACGTCGGGAAAGTTCT	nocyr_4002		
IG5F	CAATCGATAACCGATCGAGC	nocyr_0486	61	1400	IG17F	CTTCCTTCTTCGCCATTTCG	nocyr_4013	61	1440
IG5R	GAATGTGAGGTCTTCTCCTC	nocyr_0488			IG17R	GCAACACCGCAATCGAATTC	nocyr_4015		
IG5rtF	AGGGTGGTGGCGGGTGTGTTAG	nocyr_0487	64	1127	IG17rtF	GCTTGGGCGGGCGGTTCTT	nocyr_4035	63	624
IG5rtR	CGAATCTGGCGGGTGAAGGTGAG	nocyr_0489			IG17rtR	GTTCCAGCGATTCGGTTGCGTTAC	nocyr_4036		
IG6extF	GGTACTACCGATTCCGGATC	nocyr_0555	61	1232	IG181tF	CCGATGCGGCGACCGATCTCTTGA	nocyr_4096	63	561
IG6extR	CTCCACGGGCGAAAAACAACG	nocyr_0557			IG181tR	ACACGCGCACCGCGCGGAACAGA	nocyr_4097		
IG6F	GAGTGTGTTCGGCGTGTGTTG	nocyr_0556	61	1354	IG18F	CCGAATATCGCCATTGTTGGT	nocyr_4111	61	1620
IG6R	GAATATCGAGGATTGACC	nocyr_0557			IG18R	GTTGAACGAATCGCACATCC	nocyr_4115		
IG6rtF	CACGGGCGGGTACCCCGTGT	nocyr_0560	63	1151	IG18rtF2	CCGACATCACCGCGGCAAGATT	nocyr_4162	63	945
IG6rtR	GACCGACATCGCTCCCAAGAGC	nocyr_0562			IG18rtR2	TTCCCGGTCCCACTGGGTGTAC	nocyr_tRNA32		
IG71tF	GCGCAGTACTACCAACGGAAGAGC	nocyr_0919	63	1403	IG191tF3	CCAGCTGCGCCGGGGACAA	nocyr_4800	63	1041
IG71tR	GGCGCCCGAGGTGAATGTTT	nocyr_0920			IG191tR3	CGCGCGGACAGCAGATAGC	nocyr_4801		
IG7F	GAATACCGGATCTACCGGATC	nocyr_0922	61	1280	IG19F	GCAAACACGATCAACATCC	nocyr_4802	61	1373
IG7R	CAATGCCGTAATCTCGGCATC	nocyr_0923			IG19R	CTGGAATCAAGGAAGGGATC	nocyr_4804		
IG7rtF	ACCGCGGGCGCCCTTGACA	nocyr_0924	63	450	IG19rtF	CATCGGGTGCGGCTGCTGACA	nocyr_4817	63	1385
IG7rtR	ACCTCGATCCCCACACCCACTTG	nocyr_0926			IG19rtR	AGGCCACCGCCGATCTCGGTTGA	nocyr_4819		
IG81tF	CGTCGTCGCTCGGTTGGTAA	nocyr_0966	63	477	IG201tF	TGGAGCGCCCCGACAAGT	nocyr_5026	63	1175
IG81tR	ACGGCCCGAGCTGAGGTGTCT	nocyr_0967			IG201tR	CGGTGGGGAACAGCAGTACAGTA	nocyr_5027		
IG8F	GCCCATCAGATCCTAATCAG	nocyr_0973	61	1448	IG20F	CATTTCGACTCATCTCCGAG	nocyr_5031	61	1427
IG8R	GGCTTTCCAAGCTCTCTTG	nocyr_0974			IG20R	CTATGTCGCTTCCAAAACG	nocyr_5032		
IG8rtF	CCCAGTCCCGGGGACCGAGTAAT	nocyr_0977	63	1018	IG20rtF	ACGCGCATCGGGTCTGCTCACAC	nocyr_5036	63	521
IG8rtR	GCGCCGTGGGCAGGCACAGC	nocyr_0979			IG20rtR	ATCGGGCCGGTCTGCTGGTCTCTG	nocyr_5037		
IG91tF	GTTCCTGACAGCGCTGGGCATAGC	nocyr_1340	63	1188	IG211tF	CCACCGCGGATGCTGAAGATGA	nocyr_5132	63	438
IG91tR	CCGGTACGCCTCGGAGGTCTTCTA	nocyr_1341			IG211tR	CGCGCCGGTGGTGAAGTT	nocyr_5133		
IG9F	CCATAGATTGATCGCATCGG	nocyr_1351	61	1458	IG21F	CATCATGTATTTTCGGCAGCG	nocyr_5146	61	1412
IG9R	CTGGAATATCAACGGTCAAG	nocyr_1352			IG21R	CTTGGGATTCAGCGGGAATC	nocyr_5147		
IG9rtF	CGCGGGCGAACTCCGGCCAGTAGGT	nocyr_1391	63	698	IG21rtF	GCCGGTGTCTGCGCATCTTTGAA	nocyr_5170	63	960
IG9rtR	GGTCTGCATGTGCGCGGATACAAG	nocyr_1392			IG21rtR	GCTGACGGCGCGGTTTGTGA	nocyr_5171		
IG101tF	CGACGTGTAAATCGAAGTAAGG	nocyr_1738	63	1533	IG221tF	CACCGAGGCGCGGATTCAGTG	nocyr_5382	63	1054
IG101tR	CTCGCCGTTGCGGATAGTGAAAT	nocyr_1741			IG221tR	GCCGAACACGCCCGCCGCACTA	nocyr_5383		
IG10F	GTTGAGGACAGCAAGGAAAC	nocyr_1779	61	1286	IG22F	GACGAAATCGCATCCTTGAC	nocyr_5397	63	1421
IG10R	CAAGTACTCACTGTGTCAG	nocyr_1780			IG22R	CAACAACACAGTGGTGGCTC	nocyr_5400		
IG10extF	CGAAGTCGTGGTGGCGTAG	nocyr_1800	61	925	IG22rtF	CGAATTCGCGGCGCCAGATAG	nocyr_5404	63	957
IG10extR	GAAAGAGTTCGTGGAGCATTC	nocyr_18001			IG22rtR	GCTGGGCGCAACGCTCCTACAT	nocyr_5405		
IG111tF	GCCTGCGCGCGGTGTGAATG	nocyr_1931	63	1177	ISNcy2F	ACCCGACCGAGCTGGGCTGGAT	ISNcy2	64	840
IG111tR	CCCCAATGCCCTGCGCGGAAGTGT	nocyr_1932			ISNcy2R	CGCGGGCGGGGTCAACACT	ISNcy2		
IG11F	GAATTACCTTCGCAACGAG	nocyr_1934	61	1581	ISNcy3F	GCCGAGACCGCACCGCAATTTG	ISNcy2	64	352
IG11R	GGTGATTGACGCTCTCATAG	nocyr_1937			ISNcy3R	CGCGCGGAAGAATTGAT	ISNcy2		
IG11extF	GGAAAGGATTGCGGATGTCC	nocyr_1939	61	1367	ISNcy4F	GACCCCGGTGATCTGCGGTTCTGT	ISNcy4	64	426
IG11extR	GTAGGCAGCCGACAGATTGCG	nocyr_1940			ISNcy4R	CGCGGGGCTGGGCGACTC	ISNcy4		
IG121tF	GAAAGCGGTGAAGATGGCAGTCAAC	nocyr_2043	63	1561	ISNfa1F	GAGCGCCGAGCGACATCTGGAGA	ISNfa1	64	436
IG121tR	AACCTCCGAGCGGTACCAAGATAC	nocyr_2044			ISNfa1R	CACCTGCACCGGCTGGGACTGAAC	ISNfa1		
IG12F	GATCACTCCTATTGTGCTCG	nocyr_2078	61	1386	ISNfa2F	TGGCGAGGTCTCCGGTAGTTGGTT	ISNfa2	64	877
IG12R	CTCGCTTGTTCATCCATCG	nocyr_2081			ISNfa2R	ACGCGCGGGTGTGTTGTTGATCG	ISNfa2		
IG12rtF	AGCGGTGGCTCTATGCGTCAGTCA	nocyr_2082	63	1144	ISNfa5F	CGTGCAGCGCCGCGTCTGTAC	ISNfa5	64	564
IG12rtR	CGCCCGCAGTAGTGTCTATAGAAG	nocyr_2083			ISNfa5R	CGGGCTTTGGCGGGTGTGTTG	ISNfa5		
IG131tF	CAACTGGATCGGCAAGAACAATATA	nocyr_2826	63	1746					
IG131tR	TACCTACAACCAACCGCTAACAC	nocyr_2827							