

	10	20	30	40	50	60	70	80	90	100
1 Cattle_125-bord-f	TATTCAGCAA	ACCCTAAA--	AAGGAAAAAA	AGTAAGCGTA	ATTATGATAC	ATAAAAAAGT	TAGGTCAAGG	TGTAACCTAT	GAAATGGGAA	GAAATGGGCT
2 Goat_125-bord-f	T-ATTCAGCAA	AACCTTAA-A	AAGGAAACAAA	AGTAAGCTCA	ATACCAACAC	ATAAAGACGT	TAGGTCAAGG	TGTAACCCAT	GGAATGGGAA	GAAATGGGCT
3 Lamb_125-bord-f	TATTCAGCAA	ACCCTAAA--	AG-GGACAAA	CCTAAGCTCA	ATAATAACAC	ATAAAGACGT	TAGGTCAAGG	TGTAACCTAT	GGAGTGGGAA	GAAATGGGCT
4 Bovidae	*-*****	-*-*****	-*-*****	*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
5 Deer_125-bord-f	TATTC-GACA	ACCCTAAA--	AAGGAATAAA	AGTAAGCGTA	ACCATCATAC	ATAAAAAAGT	TAGGTCAAGG	TGTAACCTAT	GAGGTGGGAA	GAAATGGGCT
6 Stag_125-bord-f	TATTC-GACA	ACCCTAAA--	AAGGAAAAAA	AGTAAGCGTA	ATTATGATAC	ATAAAAAAGT	TAGGTCAAGG	TGTAACCTAT	GAAATGGGAA	GAAATGGGCT
7 Antelope_125-bord-f	TATTCGACAA	ACCCTAAAGG	AA-----AAA	AGTAAGCTCA	ATTATGATAC	ATAAAAAAGT	TAGGTCAAGG	TGTAACCTAT	GAAATGGGAA	GAAATGGGCT
8 Ruminants	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
9 Horse_125-bord-f	TATTCAGCAA	ACCCTAAAC-	AAGGTACCA-	-GTAAGCACA	AATATCCAAC	ATAAAAAAGT	TAGGTCAAGG	TGTAGCCAT	GGGATGGAGA	GAAATGGGCT
10 Pig_125-bord-f	TATTCGACAA	ACCCTAAAGG	AA-----CAT	AGTAAGCACA	ATCATAGCAC	ATAAAAAAGT	TAGGTCAAGG	TGTAGCTTAT	GGGTTGGAAA	GAAATGGGCT
11 Pig_125-bord-f	TATTCGACAA	ACCCTAAAGG	AA-----CAT	AGTAAGCACA	ATCATAGCAC	ATAAAAAAGT	TAGGTCAAGG	TGTAGCTTAT	GGGTTGGAAA	GAAATGGGCT
12 Wild boar_125-bord-f	TATTCGACAA	ACCCTAAAGG	AA-----CAT	AGTAAGCACA	ATCATAGCAC	ATAAAAAAGT	TAGGTCAAGG	TGTAGCTTAT	GGGTTGGAAA	GAAATGGGCT
13 Rabbit_125-bord-f	GTGCGCGACC	CACCTAAATG	AA-GTACAAT	AGTAGGCTCA	ATAGTCCC-C	ACTAACAAGA	CAGGTCAAGG	TATAGCCAT	G-AGGTGGAA	GAAATGGGCT
14 Eutheria	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
15 Chicken_125-bord-f	G-CGCGGACC	CACCTTAT-G	AAAGAACAC	AGTAGCTCA	ATAGCCCTG	CCTAATAAGA	CAGGTCAAGG	TATAGCCAT	GGGTTGGAA	GAAATGGGCT
16 Goose_125-bord-f	TATTCGACAA	ACCCTAAA--	AAGGAACAAT	AGTAAGCACA	ATCATAGCAC	ATAAAAAAGT	TAGGTCAAGG	TGTAGCTTAT	GGGTTGGAAA	GAAATGGGCT
17 Turkey_125-bord-f	GTGCGCGACC	CACCTAAATG	AAAGTACAAT	AGTAGGCTCA	ATAGTCCC-C	ACTAACAAGA	CAGGTCAAGG	TATAGCCAT	GAGGTGG-AA	GAAATGGGCT
18 All	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****

	110	120	130	140	150	160	170	180	190	200
1 Cattle_125-bord-f	ACATTTCTTA	CACCAAGAGA	A-----TCAA	GCAC----GA	AAG-TTATTA	TGAAACCAAT	AACCA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
2 Goat_125-bord-f	ACATTTTCTTA	CCTTAAGAAA	A-----TTAA	T-----ACGA	AAGCC-ATTA	TGAAATTAAT	--GACCA--A	AGGAGGATTT	AGTAGTAAAC	TAAGAATAGA
3 Lamb_125-bord-f	ACATTTTCTTA	CCCAGAAA	T-----TTAA	T-----ACGA	AAGCC-ATTA	TGAAATTAAT	AGCCA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
4 Bovidae	*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
5 Deer_125-bord-f	ACATTTTCTTA	ATTTAAGAAA	A-----CTTA	-AC--ACGA	AAG-TTATTA	TGAAATTAAT	AACCTA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
6 Stag_125-bord-f	ACATTTCTTA	CACCAAGAGA	A-----TCAA	GCAC----GA	AAG-TTATTA	TGAAACCAAT	AACCA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
7 Antelope_125-bord-f	ACATTTCTTA	CACCAAGAGA	A-----TCAA	GCAC----GA	AAG-TTATTA	TGAAACCAAT	AACCA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
8 Ruminants	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
9 Horse_125-bord-f	ACATTTTCTTA	CCCTAAGAAC	AAGAACCTTTA	CCCGGACGA	AGTCTC-CA	TGAAACTTGA	GACTA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
10 Pig_125-bord-f	ACATTTTCTTA	CAT-AAGAAT	A-----TCCA	CCAC--ACGA	AAG-TTTTTA	TGAAACTTAA	AACCA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
11 Pig_125-bord-f	ACATTTTCTTA	CAT-AAGAAT	A-----TCCA	CCAC--ACGA	AAG-TTTTTA	TGAAACTTAA	AACCA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
12 Wild boar_125-bord-f	ACATTTTCTTA	CAT-AAGAAT	A-----TCCA	CCAC--ACGA	AAG-TTTTTA	TGAAACTTAA	AACCA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
13 Rabbit_125-bord-f	ACATTTTCTTA	ACATAGAAC-	-----A	G-----ACGA	AAAAG-GGGG	TGAAACT---	CGCCCTTGA	AGGAGGATTT	AGCAGTAAAG	TAAGACCATA
14 Eutheria	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
15 Chicken_125-bord-f	ACATTTTCTTA	ACATAGAACA	A-----TCCA	CCAC--ACGA	AAAAG-GAGC	TGAAACCCGC	--CCTTAG-A	AGGAGGATTT	AGCAGTAAAG	TGAGATCATA
16 Goose_125-bord-f	ACATTTTCTTA	CAT-AAGAAT	A-----TCCA	CCAC--ACGA	AAGTTTTTTA	TGAAACTTAA	AACCA----A	AGGAGGATTT	AGCAGTAAAC	TAAGAATAGA
17 Turkey_125-bord-f	ACATTTTCTTA	ACATAGAACA	G-----TCCA	CCAC--ACGA	AAAAG-GGGG	TGAAACTCGC	--CCTTGGGA	AGGAGGATTT	AGCAGTAAAG	TAAGACCATA
18 All	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****

	210	220	230	240	250	260	270	280	290	300
1 Cattle_125-bord-f	GT-----	GCTTAGTTGA	ATTAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAA--ATA	GATTCAGTGC	ATCTAACCC-	TATTTAAACG
2 Goat_125-bord-f	GT-----	GCTTAGTTGA	ATTAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAA--ATA	AATCAACATG	ACTCAAGC-	TATTTAAACG
3 Lamb_125-bord-f	GTGCT-----	---TAGTTGA	ATCAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAA--ATA	AATATGATAT	ACTTAAAC-	TATT--TACA
4 Bovidae	*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
5 Deer_125-bord-f	GT-----	GCTTAGTTGA	ATTAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAA--ATA	AGCAAAATAC	ATTTAAAT-	TATTTATAGC
6 Stag_125-bord-f	GT-----	GCTTAGTTGA	ATTAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAA--ATA	GATTCAGTGC	ATCTAACCC-	TATTTAAACG
7 Antelope_125-bord-f	GT-----	GCTTAGTTGA	ATTAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAAATAGA	TTC-A-GTGC	ATCTAACCC-	TATTTAAACG
8 Ruminants	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
9 Horse_125-bord-f	G-----	GCTTAATTTGA	ATCAGGCCAT	G-AAGCGCGC	ACACACCGCG	CGTCAACCCT	CTTAAATATC	ACAAATCACA	ACATAAC---	-ATAAAACCG
10 Pig_125-bord-f	GT-----	GCTTAGTTGA	ATAAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAAGCATG	TAGT-AATAA	AAATAACCTA	TATTTCAATTA
11 Pig_125-bord-f	GT-----	GCTTAGTTGA	ATAAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAAGCATG	TAGT-AATAA	AAATAACCTA	TATTTCAATTA
12 Wild boar_125-bord-f	GT-----	GCTTAGTTGA	ATAAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAAGCATG	TAGT-AATAA	AAATAACCTA	TATTTCAATTA
13 Rabbit_125-bord-f	CTTCTCTTAA	GCCTACTTAA	AGACGGCCCT	G-GGGCAGCT	ACATACCGCG	CGTCAACCCT	CTCA--C---	AAGCT-ATCA	ATTTCAAT-A	AATA-ATACC
14 Eutheria	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
15 Chicken_125-bord-f	CCCC--TAA	GCTCACTTTA	AGACGGCTCT	G-AGGCAGCT	ACATACCGCG	CGTCAACCCT	TTCACAAGCC	ATCAACAT-C	AATAAAA---	TATATACCTC
16 Goose_125-bord-f	GT-----	GCTTAGTTGA	ATAAGGCCAT	G-AAGCAGCG	ACACACCGCG	CGTCAACCCT	CTCAAGCATG	TAGT-AATAA	AAATAACCTA	TATTTCAATTA
17 Turkey_125-bord-f	CTTCTCTTAA	GCCTACTTAA	AGACGGCCCT	G-GGGCAGCT	ACATACCGCG	CGTCAACCCT	CTCAAGCATG	ATCAAT-TTC	AATAAAA---	---TAATACC
18 All	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****

	310	320	330	340	350	360	370	380	390	400
1 Cattle_125-bord-f	CACCTA-GC-T	ACATGAGAGG	AGACAAGTGC	TAACAAGGTA	A-GCATA					
2 Goat_125-bord-f	CATCAACTAC	ATG--AGAGG	AGATAAGTGC	TAACAAGGTA	A-GCATA					
3 Lamb_125-bord-f	TATATCAACC	ACACGAGAGG	AGACAAGTGC	TAACAAGGTA	A-GCATA					
4 Bovidae	*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
5 Deer_125-bord-f	TATAAACCAT	--ATGAGAGG	AGACAAGTGC	TAACAAGGTA	A-GCATA					
6 Stag_125-bord-f	CACCTAGC--T	ACATGAGAGG	AGACAAGTGC	TAACAAGGTA	A-GCATA					
7 Antelope_125-bord-f	CA-CTAGC-T	ACATGAGAGG	AGACAAGTGC	TAACAAGGTA	AAGCATA					
8 Ruminants	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
9 Horse_125-bord-f	TGACCCAAAC	ATATGAAAGG	AGACAAGTGC	TAACAAGGTA	AAGC-TA					
10 Pig_125-bord-f	CA-CAACCAT	GCA--AGAAG	AGACAAGTGC	TAACAAGGTA	AAGCATA					
11 Pig_125-bord-f	CA-CAACCAT	GCA--AGAAG	AGACAAGTGC	TAACAAGGTA	AAGCATA					
12 Wild boar_125-bord-f	CA-CAACCAT	GCA--AGAAG	AGACAAGTGC	TAACAAGGTA	A-GCATA					
13 Rabbit_125-bord-f	CAACCCATAGC	TAA--AGATG	AGGTAAGTGC	TAACAAGGTA	A-GCATA					
14 Eutheria	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****
15 Chicken_125-bord-f	CCTCC-CGGC	TAA--AGACG	AGGCAAGTGC	TAACAAGGTA	AAGCATA					
16 Goose_125-bord-f	CACAA--CCAT	GCA--AGCAG	AGACAAGTGC	TAACAAGGTA	A-AGCTA					
17 Turkey_125-bord-f	CAACCCATAGC	TAA--AGATG	AGGTAAGTGC	TAACAAGG--	*****					
18 All	*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****	-*-*****

Figure 1: DNA sequence of the 12S-border primers amplicon of cattle, goat and sheep in 5'-3' orientation.

	10	20	30	40	50	60	70	80
1 Cattle_12	TATTCAGCAA	ACCCTAAAAA	GGAAAAAAG	TAAGCGTAAT	TATGATACAT	AAAAACGTTA	GGTCAAGGTG	TAACCTATGA