

Table S7**Primer sequences for genotyping**

Name	Forward	Reverse	Note / SNP (Kos/Non)
InDel-1	GTGTTGCAGCTTGAGGATGA	TGTATTGGCCGTAATCGTGA	Electrophoresis
InDel-2	TACTGCAGCTGCTGATTGCT	GCGGGATACCATGGTCTAAA	Electrophoresis
SNP-1	AACTCCGGACAACACTTGG	CAAGCAATCCAAGCAACTGA	TAAAATCATTAGTCCCTTAAC TAAAATCATTGTCCCTTAAC
InDel-3	CTCTTGTGGTTGGCAGGAT	GGTCTACCATCACCTGTAGG	Electrophoresis
InDel-4	CCTGTCAGTGTGGCTAG	GTCAAATTAATAACCTCTAACTAA	sequencing
InDel-5	TTATTACCTTGGTCCTACCCC	CTAGGGGTAGACCCTCCTG	sequencing
CAPs-1	ATTTGAAGGATAGGGCTGTAC	ATACAGCTAGGCAGGTCTCA	SmaI digestion
CAPs-2	TACGGGCTACGGACATAACA	CGCTCAGCAACGAGTTTC	TaqI digestion
SNP-3	CAGGTCCTGGCATTCAAAAA	AATGAAACGCCGACGATATT	TGCATAAAAAGCGTGTGTTTA TACATAAAAAGTGTGTTGTTA
SNP-2	CTCGTCCACACGTACAGGAA	AGGTGACCTTGAGGTTGGTG	TTGCTCCCTGCAACTTGCTGC TTGCTCCCTGAAACTTGCTGC
CAPs-3	TCA GAACTTCAACACCAAGG	ACCTTAGCCTTGCTCAGCTA	HaeIII digestion

Primer sequences for *RFT1* and *Hd3a* sequencing

Name	Forward	Reverse
RFT1_5_3	CCATCCCTGTCCAATAATGC	TTTTACAAGCTTCATCTCTC
RFT1_5_1	CCACCACACCTTTCAAGACA	ACCATGTCTCATGCAAGACC
RFT1_5_2	CTGGGCACATCATAGTAAGG	AGGTTAGTGATCCGGACGAA
RFT1_exon1	TGGCTAGCTTAACCTTCCTG	GTCTACCATCACCTGTAGGT
RFT1_exon2	TATCTTGGATGCAGAGACCC	ATGGGGTAGGACCCAAGGTAA
RFT1_intron_1	TCAATTTTCGATGTAACAGCA	TTATCTACGTTATTCACCAT
RFT1_exon4	CGGAGGGAGTATCTATTTTG	CACACTTAAGAGCCTGCATG
Hd3a_5_4	CACAGCTAGAGATGGTATCG	ATGAAATCATAATTAAGG
Hd3a_5_3	CTTAAATTTTGGATGTGTGT	CCGCAACTTATCAACCCGTA
Hd3a_5_1	CGGAAATGGTATAAAACGGG	TCTGCATCGTCTTCCTGTAC
Hd3a_5_2	GCTCGATCATATCCCATCTC	TAGGTGACCTTGAGGTTGGT
Hd3a_exon1	CAGCTGCAGCTAGTAAGCAA	TCTGCACCAACTACGACACA
Hd3a_exon2	TGTGTCGTAGTTGGTGCAGA	CCCCAAACAATAGTATGGA
Hd3a_exon4	AGCTGTTGCACATGCTCATG	CTGAACCTGCAATGTATAGC

Primer sequences for *RFT1(E105K)* construction

Name	
RFT1-XhoI-F	CTCGAGCCTGTCACTGTTTGGCTAG
RFT1-E105K-R	CACCTTTTGCCCAAATGTTGCTCCAGTG
RFT1-E105K-F	TTGGGCAAAAGGTGATGTGCTACGAGAG
RFT1-NotI-R	CGCGGCCGCCTCGAGCCAGGGGTAGACCCTCCTG