

RESEARCH NOTE

H (HRM) a a : a a a

Y J , Q L , L K , H Y a X a a Z
K L M , M E , O C , Q 266003, C
C : Q, L; - : 66@ . . .

O a a a a a a . T (Ca a & Ma , , a a -
a a ; -
a 4.4 2011, a C. a C. , a
2013). D a 30% a a a (FAO,
(R , L a & T , 2005), (Wa , 2014; X , 2014). A a a a -
a a . A a a a a -
a a C a a (16S DNA) (K &
C , C. (T , 1793), C. -
(La a , 1819), C. (F a, 1913), C. -
(La & M , 2003) a C. (A a, 1928) (L
, 2011). T a a a a a a
B a a a a a a a a a
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& Q, 1994; Wa , Z a & Z a , 2004), (Ha , 1985; L
a a a a . H , a a -
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I a a a a a a a a
C , S & R , 2005; Wa & G , 2008). I a -
a , DNA a a a a (P
, 2006), a - a (Y & L ,
2008), (R , 2008; Y , 2003)
PCR (Wa & G , 2008a). H ,
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H - (HRM) a a a a a
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a DNA (SNP) a a
Va , 2007). A (R , K & W , 2007;
HRM a a a a PCR a a
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(V , 2009), a a (B & Sa , 2007),
(Ma , 2010; Da & C , 2013) a
(Ha , 2009; M G a , 2010). T , a

(Ca a & Ma , , a a -
a a C , HRM a
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(Wa , 2014; X , 2014). A a a a -
COI a a a a a -
W , 1998), a a a a a -
(16S DNA) (K &
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16S RNA HRM
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I a , 95 a a a a
. C (= 20) a a a a
a a a a R a , S a P ; C. -
(= 19) a P a , F a P ; C. -
(= 19) a a S a A a , J a a ;
C. (= 19) a B a , G a
P ; a C (= 18) a
Ha , J a P . G DNA a a a
a a a a a -K a a -
a a a a . T a a a a
a Na D -2000 (Na D T)
a 260/280 , a a . T DNA a
a -20 °C
M a 16S RNA a a C
a a G Ba . (a :
AF280611, KC170322, FJ743507, HQ660978, JF808181). A
300- 16S RNA a a a a a
a a a a a a
. P P
P . 5.0 a (PREMIER B I a a).
D a a a a a a a a
60 ± 2 °C a a a 60 150 . A
(F: 5'-AGATTTTTAGGTGGGGCG-3', R: 5'-GCGTAAC
TTCTCCTATGATCG-3') a a a
C a a a 83
,
HRM a a .
A DNA a a 10 /µ . PCR a a
a HRM a a a L C ® 480
a - PCR (R D a). T a

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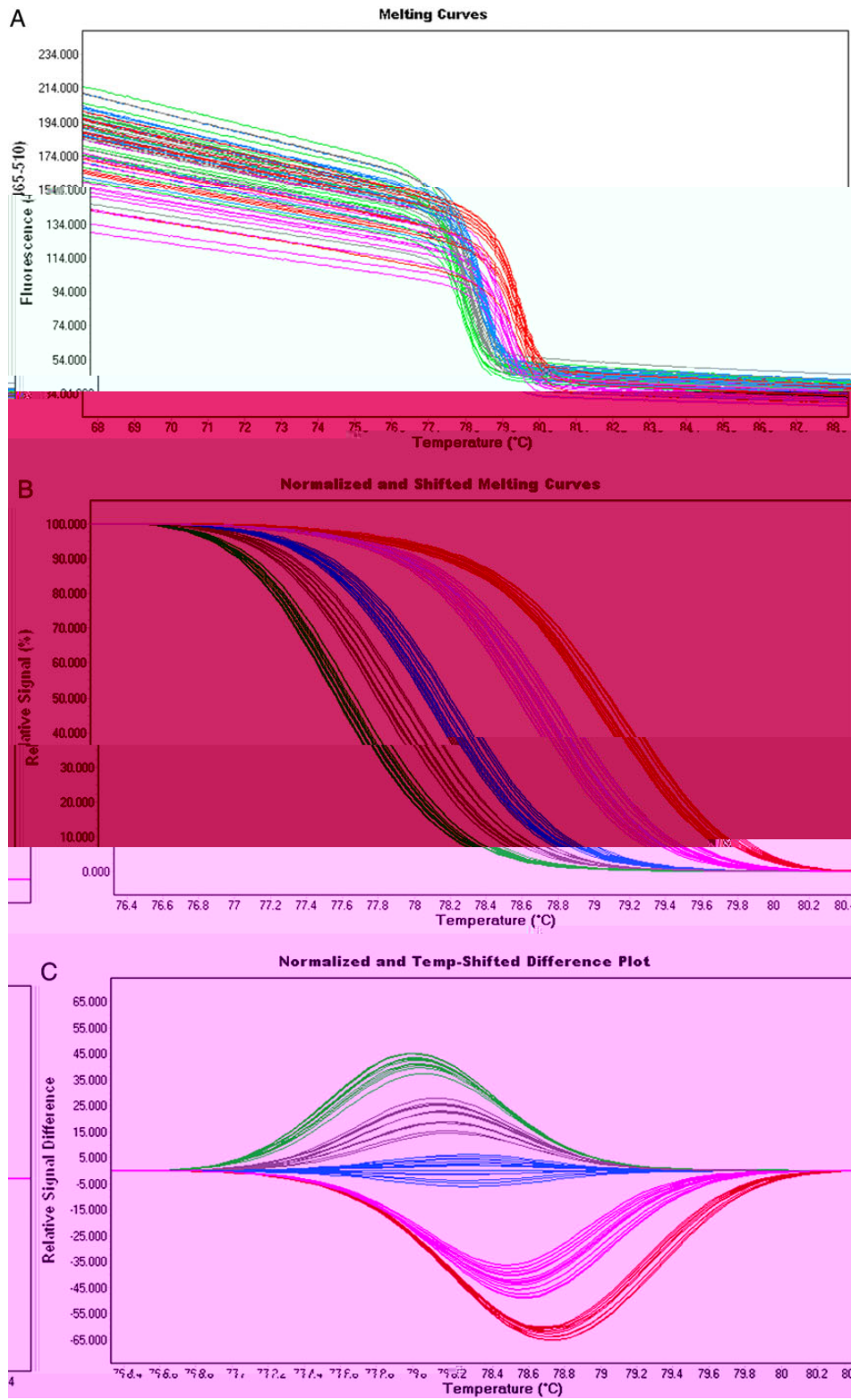


Figure 1. **A.** Raw fluorescence vs temperature melting curves for PCR products. **B.** Normalized and shifted melting curves. **C.** Normalized and temp-shifted difference plots. The difference plots show the relative signal difference between the PCR products and the reference sequence (SNP) at the C position of the DNA sequence. The difference plots are centered around 78.8°C, indicating the melting temperature of the PCR products.

Ma M a 1 μ a , 1 × L C ®480 HRM
 a a a a a (R D a), 0.2 μM
 a a a a RN a - a a a
 a 10 μ . A a RN a - a a a
 T a a a a PCR a a a .
 a a a a a 95 °C 5 , 45 a -
 a a 95 °C 40 , a a a 40 a 62 °C
 , a a a a 0.5 °C a a 10
 a , a a a 72 °C 40 . F a -
 a a a 40 °C 1 DNA a .
 M a a a a 60
 90 °C 25 a a a . D a a a a
 (R D a). G ®480 G S a S a . 1.5
 a a a , a a

T a a a a a -
 () .9(a)597(1)-2434(a) 89 9-249.8(-246. a)597246. a20 29 a41.115 T a (()3 816S(95) R25.9.)TJ-3

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