

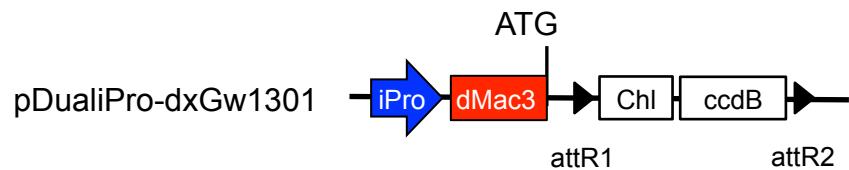
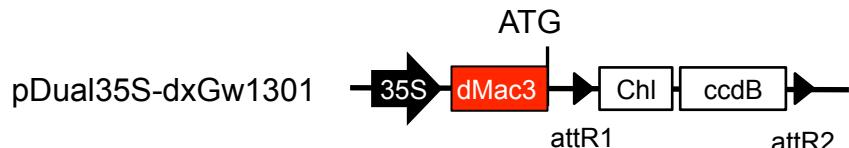
**Table A. Ratio of mutation in the transformant callus harboring pdxTALENs.**

dMac3	mutant on 1 allele	mutant on 2 alleles	WT	Total
-	11 (6.6%)	28 (16.8%)	128	167
+	34 (20.0%)	37 (21.8%)	99	170

**Table B. Ratio of mutation in the transformant callus harboring piProdxTALENs.**

glucocorticoid	mutant on 1 allele	mutant on 2 alleles	WT	total
-	0	0	96	96
+	64 (60.4%)	0	42	106

(A)



(B)

35S  
promoter

CATGGAGTCAAAGATTCAAATAGAGGACCTAACAGAACTCG  
CCGTAAGACTGGCGAACAGTTCATACAGAGTCTCTTACGA  
CTCAATGACAAGAAGAAAATCTCGTCAACATGGTGGAGCA  
CGACACACTTGTCTACTCCAAAAATATCAAAGATACT  
CAGAAGACCAAAGGGCAATTGAGACTTTCAACAAAGGGTA  
ATATCCGAAACCTCCTCGGATTCCATTGCCAGCTATCTG  
TCACCTTATTGTGAAGATAGTGGAAAAGGAAGGTGGCTCCT  
ACAAATGCCATCATTGCGATAAAGGAAAGGCCATGTTGAA  
GATGCCTCTGCCGACAGTGGTCCAAAGATGGACCCCCACC  
CACGAGGAGCATCGTGGAAAAAGAACGTTCCAACCACGT  
CTTCAAAGCAAGTGGATTGATGTATCTCCACTGACGTA  
AGGGATGACGCACAATCCCCTATCCTCGCAAGACCCTTC  
CTCTATATAAGGAAGTTCATTTCATTGGAGAGAACACGGG  
GGACTCTTGACCTCTAGT

**dMac3**

AAGACTAAAGAGAGCTTTTCAT  
ACCAAAGAAGTACAACAAAAGATTGCTCCTCATTCTGA  
ATCCTGGGACTCTCTAGCCTGTAGAAGAAGAAAGGCAGGAA  
TTTCAGCTCAAGAGAACAGATCACAATATTACCCACGGCA  
CTGTCGCAAT

attR1

ATGAGATCTGGTCTAGAGTTATCAACAAG  
TTTGTACAAAAAAAGCTGAACGAGAAACGTAAAATGATATAA  
ATATCAATATATTAAATTAGATTTCATACAAAAACAGACT  
ACATAATACTGTAACACACATATCCAGTCACTATGCAT

initiation codon

(C)

iPromoter      CATGCCGGTCGACTCTA**A**AGGATCCGGGTGACAGCCCTCCG  
ACGGGTGACAGCCCTCCGACGGGTGACAGCCCTCCGAATT  
**A**AGAGGATCCGGGTGACAGCCCTCCGACGGGTGACAGCCCT  
CCGACGGGTGACAGCCCTCCGAATTGAGCTCGGT**T**CCGG  
GGATCTGTCGACCTCGATCGAGATCTCGCAAGACCCTTCC  
TCTATATAAGGAAGTTCATTCATTGAGAGGACACGCTG  
AAGCTAGTCGACTCTAGCATTAAAT**AAGACTAAAGAGAGC**  
**TTTTCATACCAAAGAAGTACAACAAAAGATTGCTCCTCA**  
**TTTTCTGAATCCTGGGACTCTCTAGCCTGTAGAAGAAGAAA**  
**GGCAGGAATTCAGCTCAAGAGAACAGATCACAAATATTAC**  
**CCACGGCACTGTCTCGCAAT**ATG**TGCGGACGTATTCTAGAG**  
TTATCAACAAGTTGTACAAAAAAGCTGAACGAGAAACGTA  
AAATGATATAAATATCAATATATTAAATTAGATTTCGCATA  
AAAAACAGACTACATAATACTGTAAAACACAACATATCCAG  
TCACTATGCAT

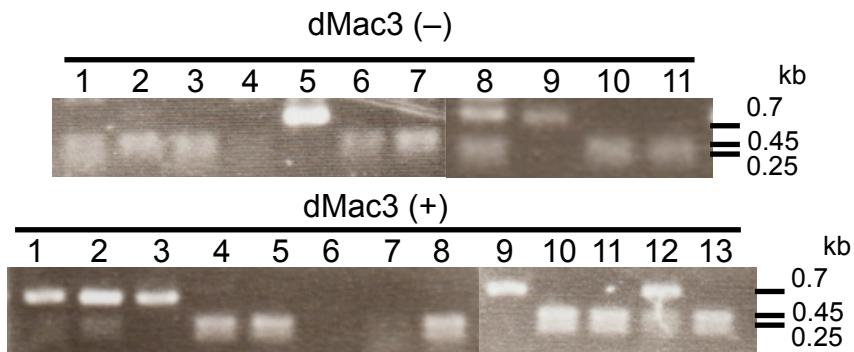
dMac3

attR1

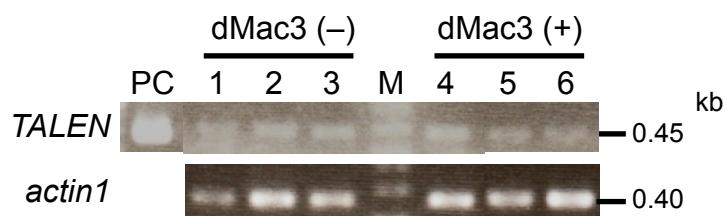
↓  
initiation codon

Fig A. Details of pDual35S-dxGw1301 and pDualPro-dxGw1301.

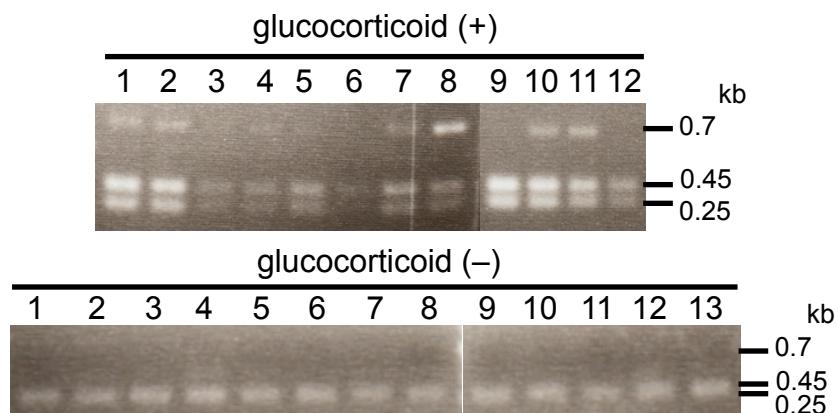
**(A)**



**(B)**



**(C)**



**Fig B. Detection of targeted mutation.**