

# A male sterility-associated cytotoxic protein ORF288 in *Brassica*

## *juncea* causes aborted pollen development

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### Supplementary Data

**Table S1** Primers used in experiments

Name	Sequence(5'-3')	Application
288GSP1	AGCAGAATCACCTAGATCAACCAGCTG	genome-walking
288GSP2	ATCAACTTGGCATAACTCTCGAGGATG	genome-walking
atp6DGSP1	GGTTCGCTTGGACTATGCTATGTATGA	genome-walking
atp6DGSP2	TTATAGTTCTTGCATTAACCGGTCTGG	genome-walking
adaptor primer 1	GTAATACGACTCACTATAGGGC	genome-walking
adaptor primer 2	ACTATAGGGCACGCGTGGT	genome-walking
atpA	GCTGCGGAACTAACGAATCTA	probe
	AATCCACCTTTAAGGGCTTGT	probe
atp9	TGTTAGAAGGTGCAAAATCAA	probe
	GCAAACAATGCAATAGCTTCG	probe
orfB	TGCCTTTTCTTCTTTACTTTC	probe
	CCAGTATTTGAAGGAGAGGAC	probe
KpnI288STR	GGGGTACCATGAAAAATAGACTCCAAT	RT-PCR
	GG	

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BamHI288ED	<u>CGGGATCCT</u> CAGTCTAGATAATGCCGGG	RT-PCR
	C	
ATP6CRF	AACCGGTCTGGAATTAGGTGT	CR-RT-PCR
ATP6CRL	TTCATAGGAATCAATGGGACA	CR-RT-PCR
atp6	ATGAATCAAATAGGGCTGGT	probe
	CCGGTTAATGCAAGAACTAT	probe
atp6288UP2	TCGCTTGGACTATGCTATGT	RT-PCR
atp6288DOWN2	TCGGTTTGGTGATTCACTAT	RT-PCR
288UP3	TCATCGCCATGGTAATCTCT	RT-PCR
288DOWN3	GTCGAAGATCCCACCGTGAT	RT-PCR
orf288up	ATGAAAAATAGACTCCAATGG	RT-PCR
orf288down	TCAGTCTAGATAATGCCGGGC	RT-PCR
orf288crtF	GCCCACCAGTGCGAAGAATGA	CR-RT-PCR
orf288crtR	CATTGAGGAGCTTCGGGGTTT	CR-RT-PCR
AP3BR	<u>CGGGATCC</u> ATTCTTCTCTTTGTTTAAT	Amplification of
	C	ap3 promoter
AP3F	<u>GGGGTACCC</u> AGTAACTGTGGCCAACTTA	Amplification of
	GTTTTGAAAC	AP3 promoter
coxVIF	<u>CGGGATCC</u> ATGCTTTCACCTACGTCAATC	amplification of
	TA	<i>coxVI</i>
		presequence
T-288L	ATAGCCATTGGAGTCTATTTTT <u>CATA</u> AAG	amplification of

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	CAGATATCTAGAGCTACACAAA	<i>coxVI</i>
		presequence
T-288F	TTTGTGTAGCTCTAGATATCTGCTTATG	amplication of
	AAAAATAGACTCCAATGGCTAT	<i>orf288</i>
NOSR	A <u>ACTGCAGGTTTCTTAAGATTGAATCCT</u>	amplication of
		NOS sequence
NOSF	CCC <u>AAGCTT</u> CCCGATCTAGTAACATAGA	amplication of
		NOS sequence
VNO2	CGGGATCCATGAAAAATAGACTCCAAT	amplication of
	GG	<i>orf288</i>
VNOF	GGGGTACCAGCCTGGGGTGCCTAATGA	amplication of
	GT	35S promoter
VNOL	CGGGATCCGGTCGATCGACAGATCTGC	amplication of
	GA	35S promoter
288L	ACGCGTCGACTCAGTCTAGATAATGCCG	amplication of
	GGCATTACCTG	<i>orf288</i>

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## FIGURE LEGENDS

**Figure S1** The map of pM999GFP vector.

**Figure S2** Multiple alignment of DNA sequences of *orf288*, *orf286* and *orf263*.

The black arrow indicates that *orf286* is identical to *orf288* at the sites of four single nucleotide differences between *orf288* and *orf263*.

Figure S1

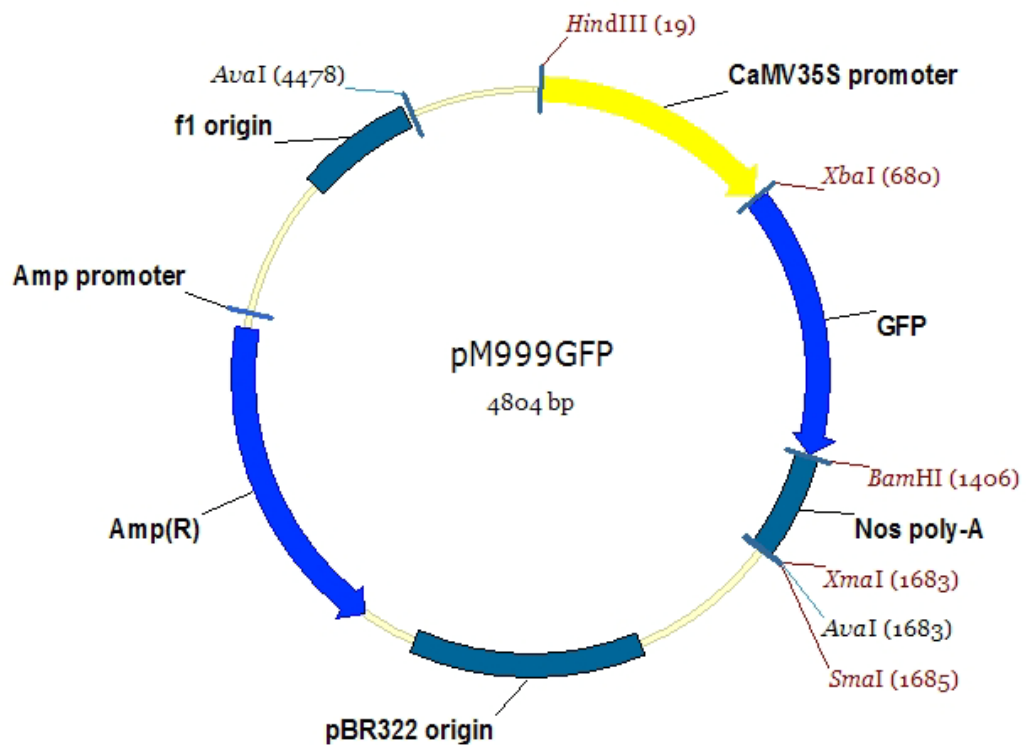


Figure S2

