

Table S1. The artificial feed formula for *Monochamus alternatus* larvae.

Artificial feed formula									
Bark	Xylem	Millfeed	shrimp shell powder	saccharose	sodium benzoate	sorbic acid	Yeast Extract	agar powder	H ₂ O
100 g	50 g	60 g	10 g	40 g	4 g	2 g	25 g	30 g	350 mL

Table S2. Primers for verification of AMP genes

Primer Name	Sequence	Primer Usage
Attacin-1-F	GCTACCGGAAGATTTGAATTCCCTAGGGCGGCCGCGA	Determination
Attacin-1-R	GCTACCGGAAGATTTGAATTCCCTAGGGCGGCCGCGA	Determination
Attacin-2-F	CTTACGTAATGAAATACTTTGTTTTCTTTGCCATGATGACAG	Determination
Attacin-2-R	GGACACGGAAGATTTGAATTCCCTAGGGCGGCCGCGA	Determination
Cecropin-2-F	CTTACGTAATGAATTTCTCAAGAGCTCTGTTTTACGTTTTCG	Determination
Cecropin-2-R	ATCGCTCACGGGAAAGAATTCCCTAGGGCGGCCGCGA	Determination
Defensin-1-F	CTTACGTAATGTTGATTCCAATTCAGTCAAACTAGTTGCAA	Determination
Defensin-1-R	AATTCTAAGCGAGTTTGCATTTGTCGTGCGGCCGCGA	Determination

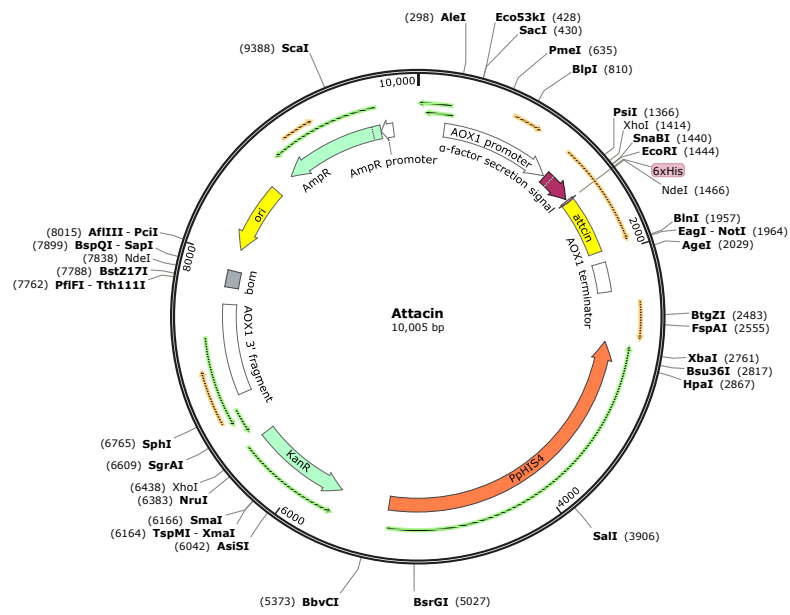


Figure S1. Map of AMP gene eukaryotic expression vector.

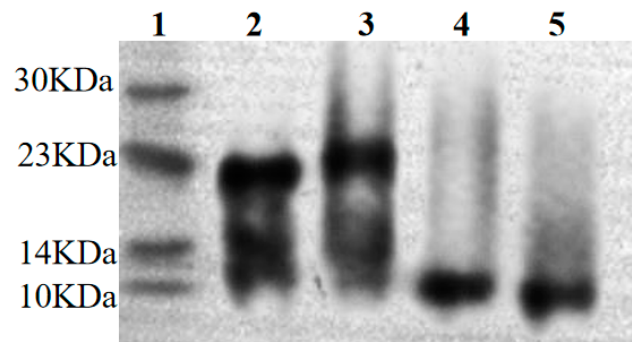


Figure S2. Immunoblot analysis of *M. alternatus* AMPs proteins. Lane 1: molecular weight markers; lane 2-5: *P. pastoris* induction expression product of pPIC9K-AMPs.