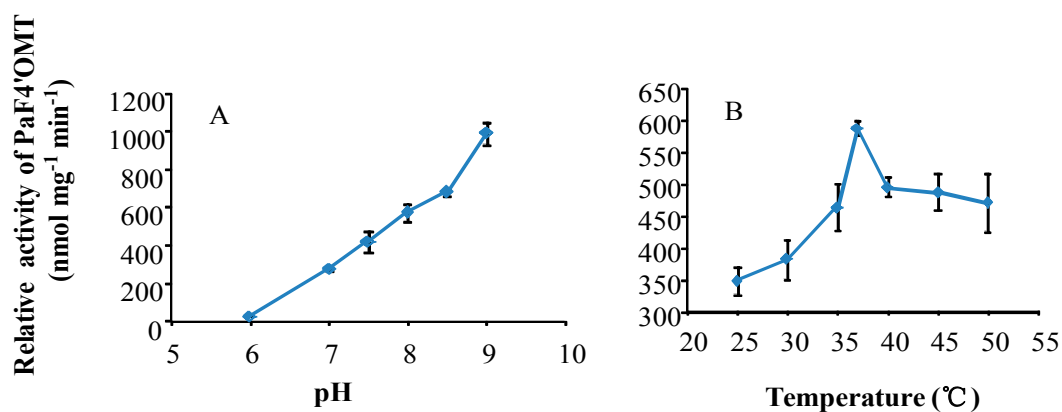


**Figure S1.** SDS-PAGE analysis of recombinant proteins. Each lane was loaded with the output of *E. coli* cells harboring a transgene construct. Lane 1: pET32a (empty vector control), lane 2: PaF4'OMT, lane 3: PaCOMT1-Tr, lane 4: PaCOMT2, lane 5: PaCOMT3, lane 6: PaCOMT4. M: molecular mass standards.



**Figure S2.** The effect of varying the pH and temperature on enzyme activity.

**Table S1** Sequences of oligonucleotide primers used for 3' RACE.

Primer name	Primer sequences (5' to 3')
PaCOMT2-GSP-1	ACCCTGGGCACTGAAGGCTGTTGTGA
PaCOMT2-GSP-2	CGCCGTATCTATCCTGGAGCGCGTCA

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PaCOMT2-GSP-3	TGGCCGTTCTCCACAACAACAGCGA
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**Table S2** Sequences of oligonucleotide primers used for cDNA cloning.

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Primer name	Primer sequences (5' to 3')
PaCOMT1-F1	TATTGAGGACGCCGAGAG
PaCOMT1 -R1	CAGCGTAGAATGGATATG
PaCOMT2 -F1	CCTCCACATCGTCCATAGT
PaCOMT2 -R1	CAGAATACCAAGCAGCAAC
PaCOMT2 -F2	GCAGACGAGTGTGAGAGAC
PaCOMT3-F1	AAGCGGTCTGTTAGTGAC
PaCOMT3-R1	CGGGAGTTGTTGTCTGAG
PaCOMT4 -F1	CTCCAAAACCTTCGAGCT
PaCOMT4 -R1	CAGTATCCTATGGCACC
PaCOMT4 - F2	TATTTGAGTGCTAGCCAG
PaCOMT4 -R2	GACATTTGCCTCAGTGCT

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**Table S3** Sequences of oligonucleotide primers used for heterologous expression.

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Primer name	Primer sequences (5' to 3')
PaCOMT1-PF	CGGGATCCATGGCGGTATCCACGAATGG
PaCOMT1-PR	CCCTCGAGCTACTTCCGGACCTCTATGA
PaCOMT1-Tr-PF	CGGGATCCATGTCTGTTAGCGCCAATGT
PaCOMT2-PF	CGGGATCCATGTCAATAGCCATGAGTGG
PaCOMT2-PR	CCCAAGCTTTCAGTGCTGAATTTTACGGA
PaCOMT3-PF	CGAGCTCATGGTCCCACAAGATCAAAG
PaCOMT3-PR	CCCTCGAGTCAAGACATGGGAACTTCGA
PaCOMT4-PF	GGAATTCATGGTCCCACAAGATCAAAG

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PaCOMT4-PR

CCCTCGAGTCAAGACATGGGAACTTCGA

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