SUPPLEMENTAL MATERIAL for:

A plant-responsive bacterial signaling system senses an ethanolamine derivative

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Table S1. Compounds present in the Biolog plates PM1-8 that were able to induce *pipA* expression in GM79 Δ*pipAaapA* (pP_{pipA}-*gfp*)

Compound	Average fold change relative to negative control from two independent experiments
Ala-Asp	8.9
Ala-Lys	4.8
Ala-Thr	3.3
D-Ala-D-Ala	9.2
D-Ala-Gly	3.8
Ethanolamine	**48.2**
Ethylamine	4.4
Gly-Asp	8.5
Gly-D-Asp	7.4
Gly-D-Ser	7.7
Gly-D-Thr	8.4
Gly-Gly-Phe	2.6
Gly-Lys	17.2
Gly-Met	4.9
Gly-Ser	6.8
Gly-Thr	12.0
His-Gly	4.7
His-His	2.6
L-Cysteine	4.1
L-Lyxose	4.5
Ser-Glu	4.6
Ser-Phe	11.4
Ser-Pro	8.3
Sulfate	2.7
Taurocholic acid	3.2
Thr-Ser	2.5

Table S2. Strains and plasmids used in this study

Strain or plasmid	Relevant genotype/phenotype	Ref.
Strains		
Pseudomonas sp.		
GM79	Wild-type isolated from *Populus deltoides* root endosphere	(1, 2)
79Δ*aapF*	Transporter PBP gene (*aapF*/PMI36_*04617*) in-frame deletion in GM79	this work
79Δ*pipR*	*pipR* (*PMI36_04623*) in-frame deletion in GM79	(3)
79Δ*aapB*	Transporter TMD gene (*aapB/PMI36_04621*) in-frame deletion in GM79	(3)
79Δ*pipAaapA*	Peptidase-encoding genes *pipA* (*PMI36_04624*) *aapA* (*PMI36_04622*) double deletion in GM79	(3)
E. coli		
M15	F-, Φ80ΔlacM15, thi, lac-, mtl-, recA+	Qiagen
S17-1	*recA*, *thi*, *pro,* RP4-2-Tc::Mu-Km::Tn7	(4)
Plasmids		
pQE30	N-terminal His-protein expression vector, Ap^R	Qiagen
pRep4	*lacI*–containing vector, Km^R	Qiagen
pQE*aapF*	Cytoplasmic N-terminal His_6-AapF expression plasmid, Ap^R	This work
pPROBE-NT	Broad host vector containing promoterless *gfp* reporter, Km^R	(5)
pP_{pipA}-*gfp*	*pipA* promoter region cloned into *gfp*-reporter pPROBE-NT, Km^R	(3)
pEX19Gm	Suicide vector, *sacB*, Gm^R	(6)
pMMB67EH-TetRA	IPTG-inducible, broad host expression plasmid derived from pMMB67EH (7), Tc^R	(3)
pMM*aapF*	Transporter SBP gene (*aapF/PMI36_04617*) cloned into pMMB67EH-TetRA, Tc^R	this work

PBP, periplasmic binding protein; TMD, transmembrane domain; Ap, ampicillin; Km, kanamycin; Gm, gentamicin; IPTG, isopropyl β-D-1-thiogalactopyranoside; Tc, tetracycline.

Table S3. Primers used in this study

Name	DNA sequence (5'-3')	Description
aapFmut_1F	ACTAGAATTCCCCGTGTCGATGAACTGCTGACT	79ΔaapF construction
aapFmut_1R	CGGCGAGCAATTTCAAATGCCTGG	79ΔaapF construction
aapFmut_2F	CATTTGAAATTGCTCGCCGCTACATGACCCGCTACAAGAAC GACAA	79ΔaapF construction
aapFmut_2R	CATGGATCCTCACCTCGTTACAGGCGTTGTGG	79ΔaapF construction
aapFcomp_F	AATGAATTCCAAGAAGGAGTTTGACCATGAGATCCAGG	79ΔaapF complementation
aapFcomp_R	CATAAGCTTTCAGTTCTTCACCGTTTCCTCAAGAGAG	79ΔaapF complementation
CytoHisAapF_F	CCGCGCATGCGCGGGTGTACTCACCATCGG	His_6-AapF cytoplasmic expression in *E. coli*
CytoHisAapF_R	GGCAAGCTTTCAGTTCTTCACCGTTTCCTCAAGAGAGAA	His_6-AapF cytoplasmic expression in *E. coli*

Restriction enzyme sites are underlined.

SUPPLEMENT REFERENCES

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