



# Correction for Brigham et al., “Whole-Genome Microarray and Gene Deletion Studies Reveal Regulation of the Polyhydroxyalkanoate Production Cycle by the Stringent Response in *Ralstonia eutropha* H16”

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Volume 78, no. 22, p. 8033–8044, 2012, <https://doi.org/10.1128/AEM.01693-12>. Follow-up studies of the *Ralstonia eutropha* strain originally named Re2411 resulted in a recharacterization of the relevant genotype of the strain. Based on these data we acquired, the strain Re2411 is genotypically the same as strain Re1034. Thus, results from the previous paper cannot be attributed to the stringent response, and our initial model of the stringent response has been significantly updated. More information on this subject may be found in a recent work by Jüngert et al. (Appl Environ Microbiol 83:e00755-17, 2017, <https://doi.org/10.1128/AEM.00755-17>), which describes the influence of SpoT1 and SpoT2 [and (p)ppGpp] on PHB accumulation and mobilization in *R. eutropha*.

Page 8033, abstract, lines 9 and 10: “Furthermore, a ppGpp synthase deletion mutant did not show an accumulation of PHB, and the chemical induction...” should read “The chemical induction...”

Page 8034, Table 1: Strain “Re2411” should read “Re1034,” and the genotype/characteristic of this strain should read “H16  $\Delta$ phaC.”

Page 8034, column 2, lines 49 and 52: “Re2411” should read “Re1034.”

Page 8035, column 1, lines 15 and 50: “Re2411” should read “Re1034.”

Page 8036, column 2, line 7: “**Involvement of RelA (SpoT2) in PHB biosynthesis**” should read “**Deletion of phaC affects other PHB biosynthesis activities.**”

Page 8036, column 2, lines 7–14: “To ascertain that the changes in gene expression mentioned above can be attributed to a stringent response, we created a ppGpp synthase deletion strain, H16  $\Delta$ spoT2, denoted Re2411 (Table 1). Under conditions of nitrogen starvation, Re2411 accumulated no detectable PHB (Fig. 1A), confirming the hypothesis that the stringent response is required for PHB accumulation, confirming the hypothesis that the stringent response is required for PHB accumulation. To obtain further evidence that...” should read “We created a PHB synthase deletion strain, H16  $\Delta$ phaC, denoted Re1034. To obtain evidence that...”

Page 8037, Fig. 1: In panel A and in the legend, line 3, “Re2411” should read “Re1034.”

Page 8037, Table 4: Strain “Re2411” should read “Re1034.” The activity numbers for PhaC are artifacts of the assay used (Re1034 should have an activity of 0 units) and should be omitted.

**Citation** Brigham CJ, Speth DR, Rha C, Sinskey AJ. 2017. Correction for Brigham et al., “Whole-genome microarray and gene deletion studies reveal regulation of the polyhydroxyalkanoate production cycle by the stringent response in *Ralstonia eutropha* H16.” Appl Environ Microbiol 83:e01216-17. <https://doi.org/10.1128/AEM.01216-17>.

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Page 8037, column 1, lines 6 and 7: "To investigate whether SpoT2 (RelA) affects the activities of key PHB biosynthetic enzymes, we examined..." should read "We examined..."

Page 8037, column 1, lines 10 and 11: "Re2411, but the *spoT2* mutant strain..." should read "Re1034, but the *phaC* mutant strain..."

Page 8037, column 1, line 17: "Re2411" should read "Re1034."

Page 8037, column 1, lines 19 and 20: "Re2411 to determine if the lack of *relA*..." should read "Re1034 to determine if the lack of *phaC*..."

Page 8037, column 1, lines 26 and 27: "Re2411 than in those of the wild type, suggesting that the expression or activity of citrate synthase is affected in the *relA* mutant" should read "Re1034 than in those of the wild type, suggesting that the expression or activity of citrate synthase is affected in the *phaC* mutant."

Page 8037, column 2, lines 1 and 3: "Re2411" should read "Re1034."

Page 8038, Fig. 2: In panels A and B and in the legend, lines 3 and 4, "Re2411" should read "Re1034."

Page 8038, Fig. 2: In the legend, "*spoT2* deletion (Re2411)" should read "*phaC* deletion (Re1034)."

Page 8038, column 1, line 2: "RelA activity" should read "PhaC activity."

Page 8038, column 1, lines 12, 18, and 22: "Re2411" should read "Re1034."

Page 8041, column 2, lines 21–23: The sentence "Evidence for the stringent response control of PHB production in *R. eutropha* was observed in how strain Re2411 stores its reducing equivalents when it is unable to synthesize PHB" should be omitted.

Page 8041, column 2, lines 34 and 39: "Re2411" should read "Re1034."

Page 8041, column 2, lines 52–56: The sentence "The absolute PHB-negative phenotype observed for  $\Delta relA$  strain Re2411 (Fig. 1A) suggests that a nitrogen shortage causes amino acid deprivation, thus activating RelA-dependent ppGpp synthesis and PHB accumulation (69) (see Fig. S5 in the supplemental material)" should be omitted.

Page 8042, column 1, lines 1–18: The remainder of the paragraph, starting with the sentence "It is tempting to speculate..." should be omitted.

Page 8042, column 1, lines 44–51: The entire paragraph, starting with "Although previous studies..." should be omitted.

Supplemental material: Fig. S5 should be omitted. Revised supplemental material is posted at <https://doi.org/10.1128/AEM.01693-12>.