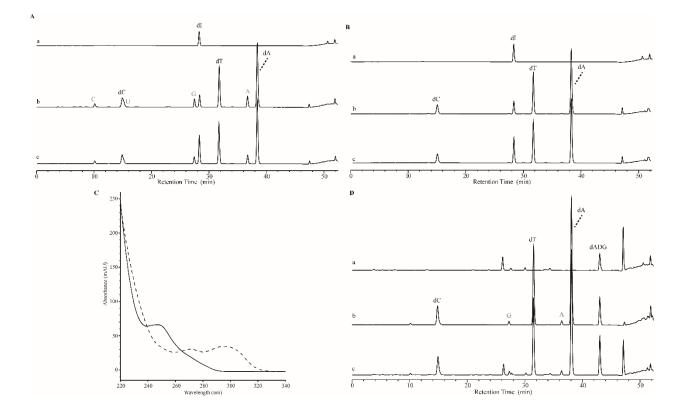
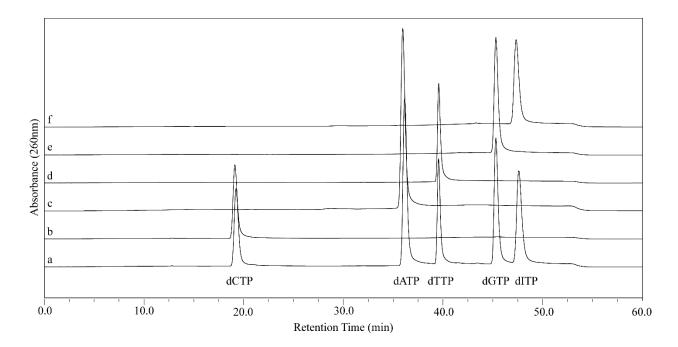
## Deoxyinosine and 7-deaza-2-deoxyguanosine as carriers of genetic information in the DNA of *Campylobacter* viruses

Clay S. Crippen<sup>a,b</sup>, Yan-Jiun Lee<sup>c</sup>, Geoffrey Hutinet<sup>d</sup>, Asif Shajahan<sup>b</sup>, Jessica C. Sacher<sup>e</sup>, Parastoo Azadi<sup>b</sup>, Valérie de Crécy-Lagard<sup>d</sup>, Peter R. Weigele<sup>c#</sup> and Christine M. Szymanski<sup>a,b,e,f#</sup>

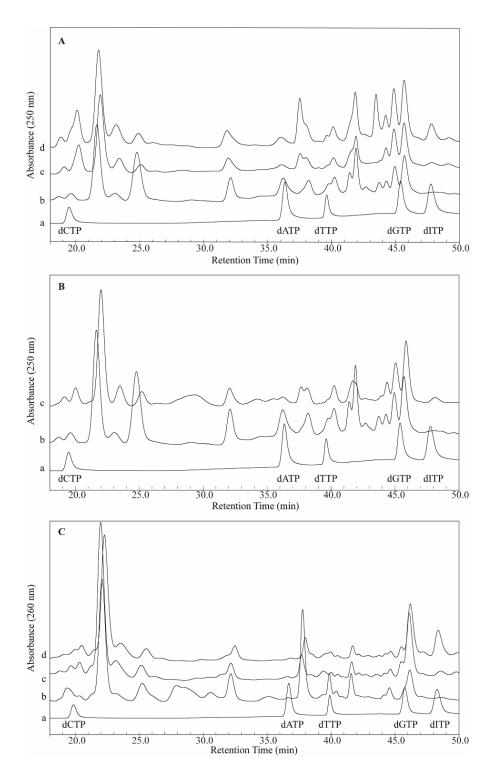
## **Contained: Supplemental Figures**



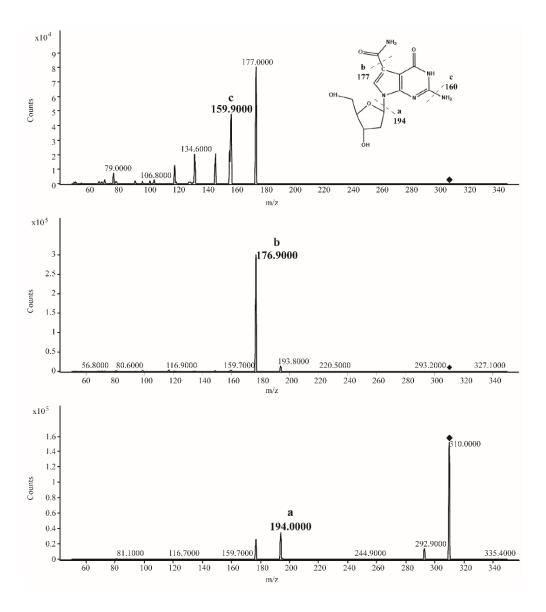
**Figure S1.** Identification of alternative nucleotides by HPLC and UV-visible spectroscopy. Shown are NCTC 12669 (A), F336 (B), and CPt10 (D) nucleosides. In each are shown: a: injected standard; b: genomic nucleosides; and c: co-injection of standard with genomic nucleosides. Grey lettering indicates ribonucleotides. (C) Ultraviolet-visible spectroscopy demonstrating absorption maxima of dI (solid line) and dADG (dashed line).



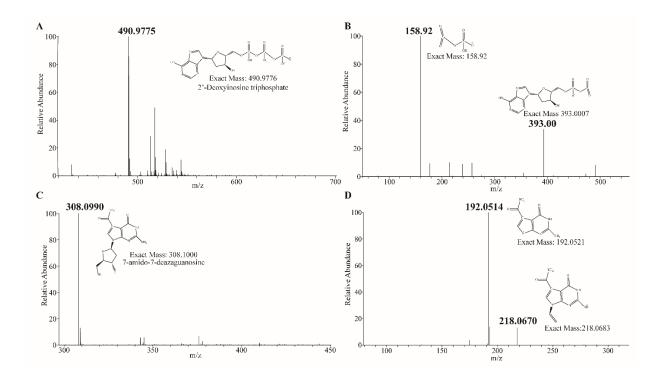
**Figure S2.** HPAEC-UV traces of dNTP standards. Shown are the dNTP mixture (a); dCTP (b); dATP (c); dTTP (d); dGTP (e); and dITP (f).



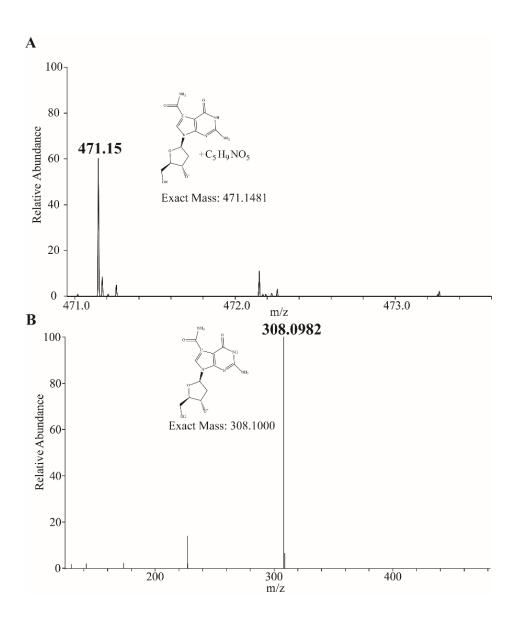
**Figure S3.** HPAEC-UV traces of nucleotide pools extracted from phage-infected cultures. Shown are a repeat of *C. jejuni* 11168 infected with NCTC 12673 (**A**), *C. jejuni* 12661 infected with NCTC 12673 (**B**), and *C. jejuni* 12661 infected with CP220 (**C**). Within each trace are dNTP standards (a); nucleotide pool extract from a non-infected culture (b); nucleotide extract from a phage-infected culture (c); and in **A** and **C**, co-injection of the nucleotide extract with the dITP standard to confirm the identity of the dITP peak observed (d).



**Figure S4.** Electrospray-ionization mass spectrometry of dADG. Cleavage sites are indicated and the corresponding masses are indicated.



**Figure S5.** Direct infusion MS and MS/MS of dITP and dADG standards. (A) MS spectrum of dITP. (B) MS/MS spectrum of dITP peak observed in A. (C) MS spectrum of dADG standard. (D) MS/MS spectrum of dADG peak observed in C.



**Figure S6. (A)** MS spectrum of peak 471.15 m/z observed in CP220-infected culture of *C. jejuni* 12661. **(B)** MS/MS spectrum of peak observed in **A** showing a fragmentation pattern that includes dADG.

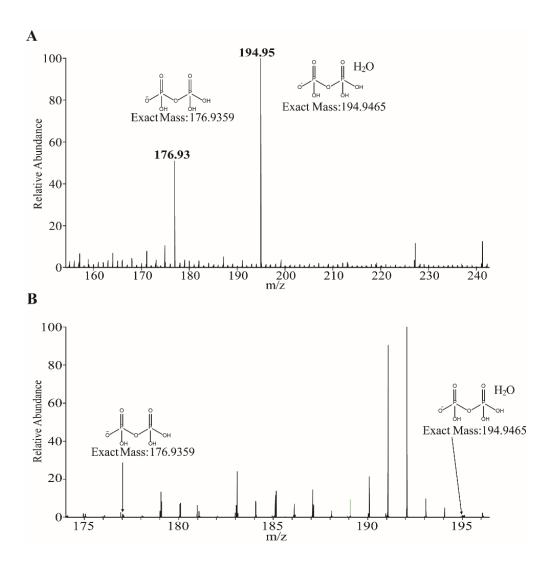


Figure S7. (A) Direct infusion MS of CP220-infected culture of *C. jejuni* 12661 to detect free phosphates. (B) Direct infusion MS of *C. jejuni* 12661 culture to detect free phosphates.