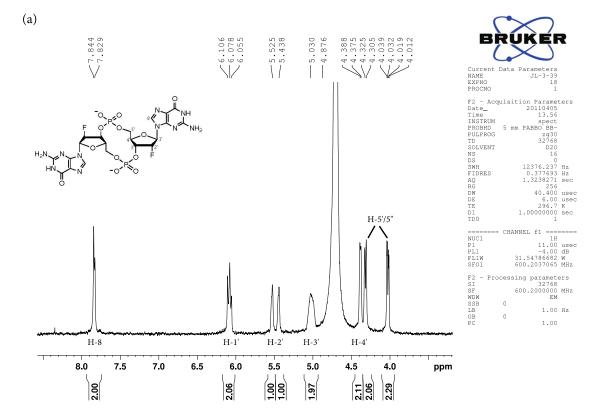
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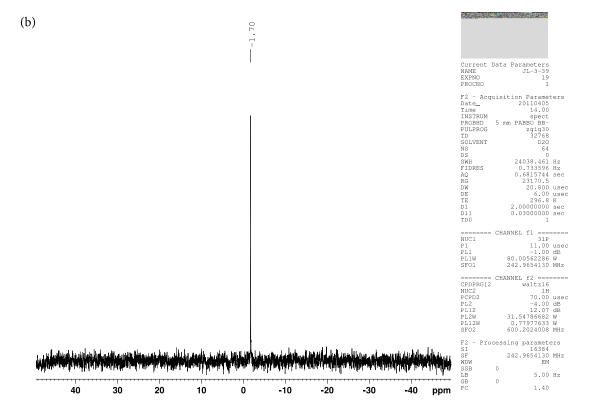
2'-Fluoro-c-di-GMP as an oral vaccine adjuvant

Jia Li, a Rhonda Kuo Lee, b Wangxue Chen, b,c* Hongbin Yana*

^aDepartment of Chemistry, Brock University, 1812 Sir Isaac Brock Way, St. Catharines, ON L2S 3A1, Canada Email: tyan@brocku.ca

^bHuman Health and Therapeutics Research Center, National Research Council of Canada, 100 Sussex Dr. Ottawa, ON K1A 0R6, Canada. Email: wangxue.chen@nrc-cnrc.gc.ca ^cDepartment of Biological Sciences, Brock University, 1812 Sir Isaac Brock Way, St. Catharines, ON L2S 3A1, Canada.





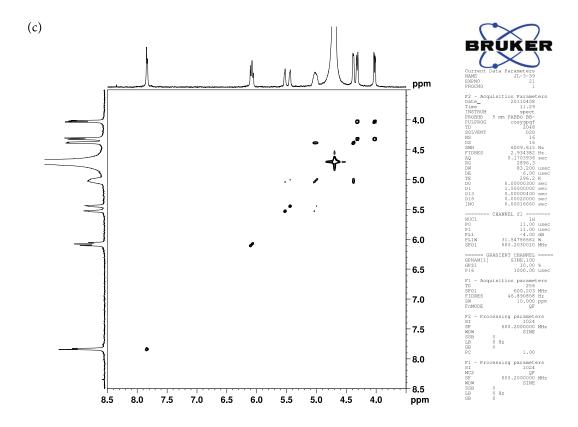


Figure S1. NMR spectra of the fully-deprotected 2'-F-c-di-GMP in D_2O . a) ¹H NMR, b) ³¹P and c) COSY.

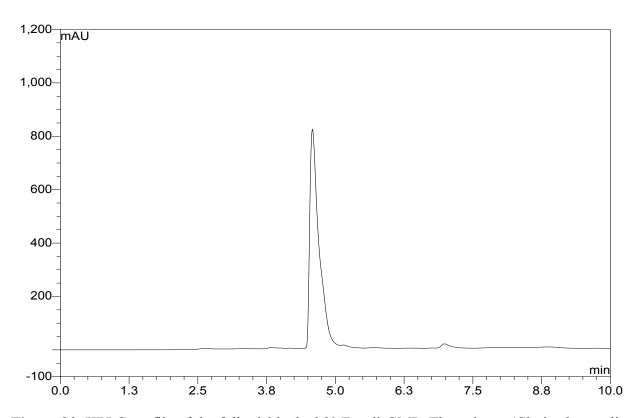


Figure S2. HPLC profile of the fully deblocked 2'-F-c-di-GMP. The column (Clarity 3 μm oligo reverse phase, 4.6×50 mm) was eluted with a linear gradient of acetonitrile – triethylammonium acetate (20 mM, pH 7.00) (0:100 to 15:85, v.v., over 10 min at 0.7 ml/min).

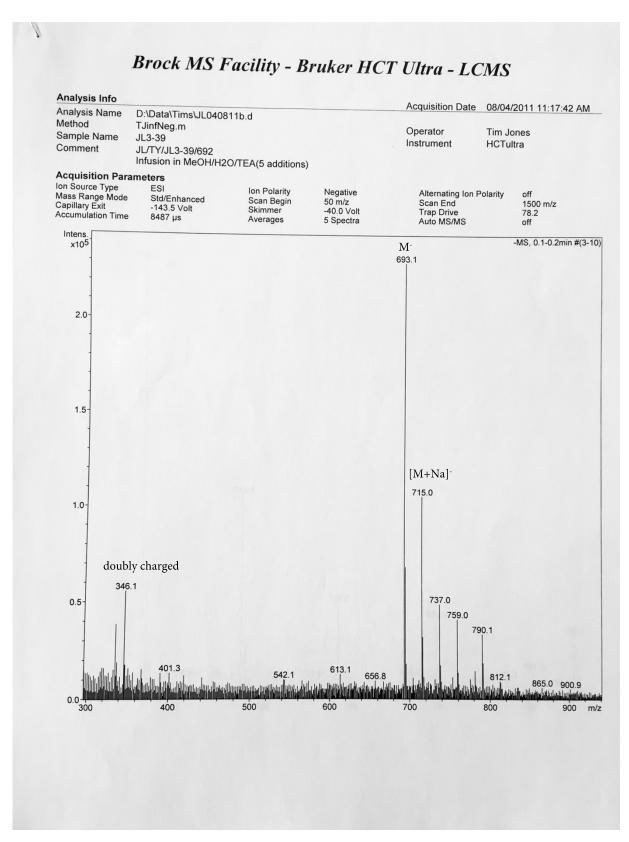


Figure S3. Mass spectrum of 2'-F-cdi-GMP under ESI negative mode.