

Electronic Supplementary Information

A coumarin-benzothiazole derivative as a FRET-based chemosensor of adenosine 5'-triphosphate

Moustafa T. Gabr ^{1*}, Mostafa M. H. Ibrahim^{2,3}, Anuj Tripathi⁴ and Chetti Prabhakar ⁴

¹ Department of Medicinal Chemistry, Faculty of Pharmacy, Mansoura University, Mansoura 35516, Egypt;
gabr@stanford.edu

² Department of Pharmacognosy, Faculty of Pharmacy, Mansoura University, Mansoura 35516, Egypt

³ Department of Basic Pharmaceutical and Toxicological Sciences, College of Pharmacy, University of Louisiana at
Monroe, Monroe, LA 71201 USA

⁴ Department of Chemistry, National Institute of Technology, Kurukshetra, Haryana, India

* Correspondence: gabr@stanford.edu; Tel.: +1-319-359-9500

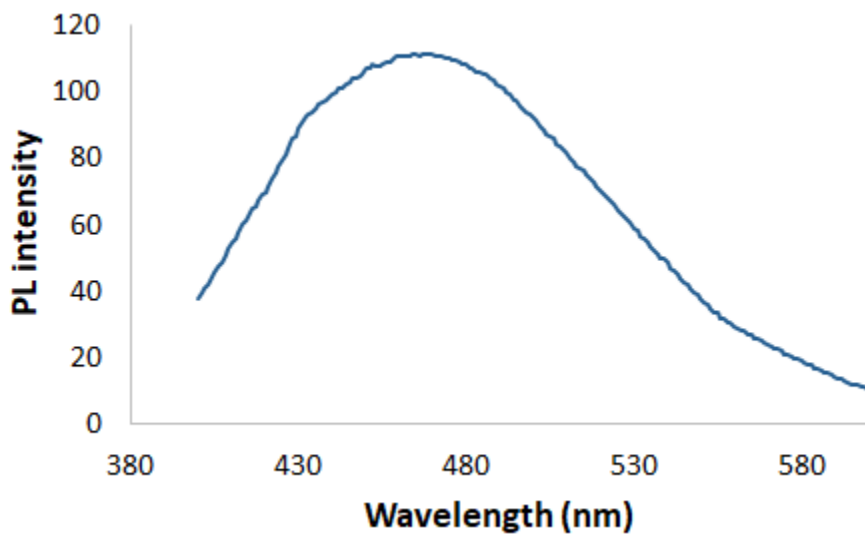


Fig. S1. Emission spectrum of **7** (10 μM).

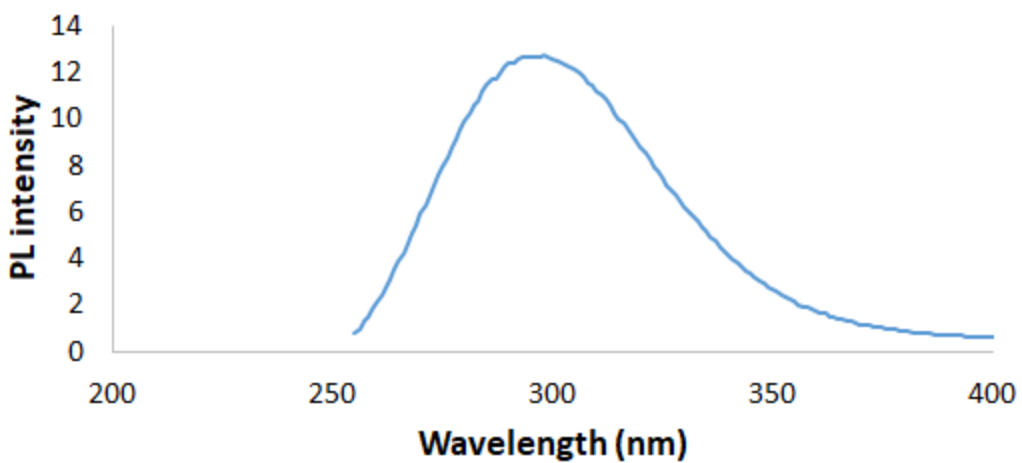


Fig. S2. Absorption spectrum of **6** (10 μM).

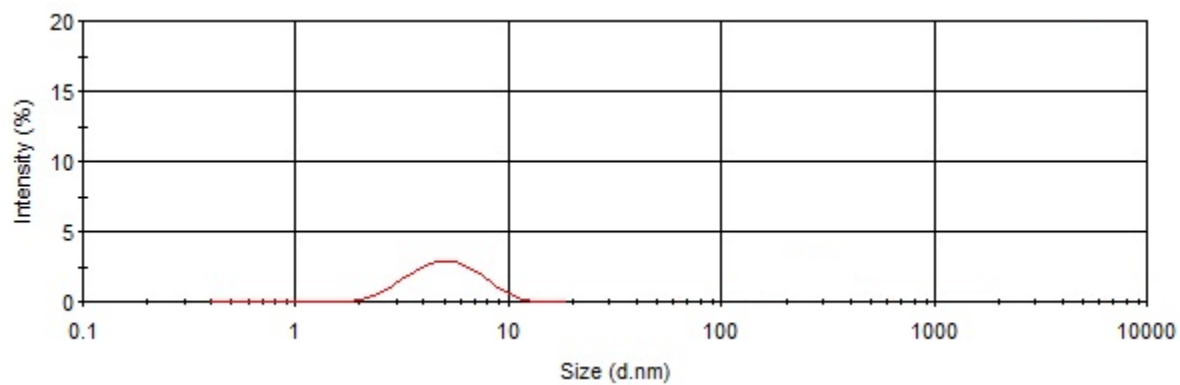


Fig. S3. DLS particle size analysis of **5** (10 μ M) in HEPES buffer (pH 7.5) in the absence of ATP.

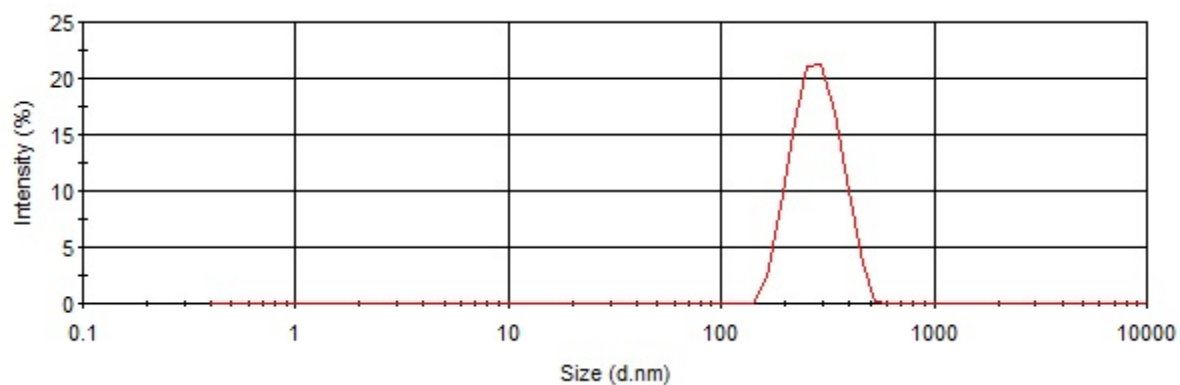


Fig. S4. DLS particle size analysis of **5** (10 μ M) in HEPES buffer (pH 7.5) in the presence of ATP (10 μ M).

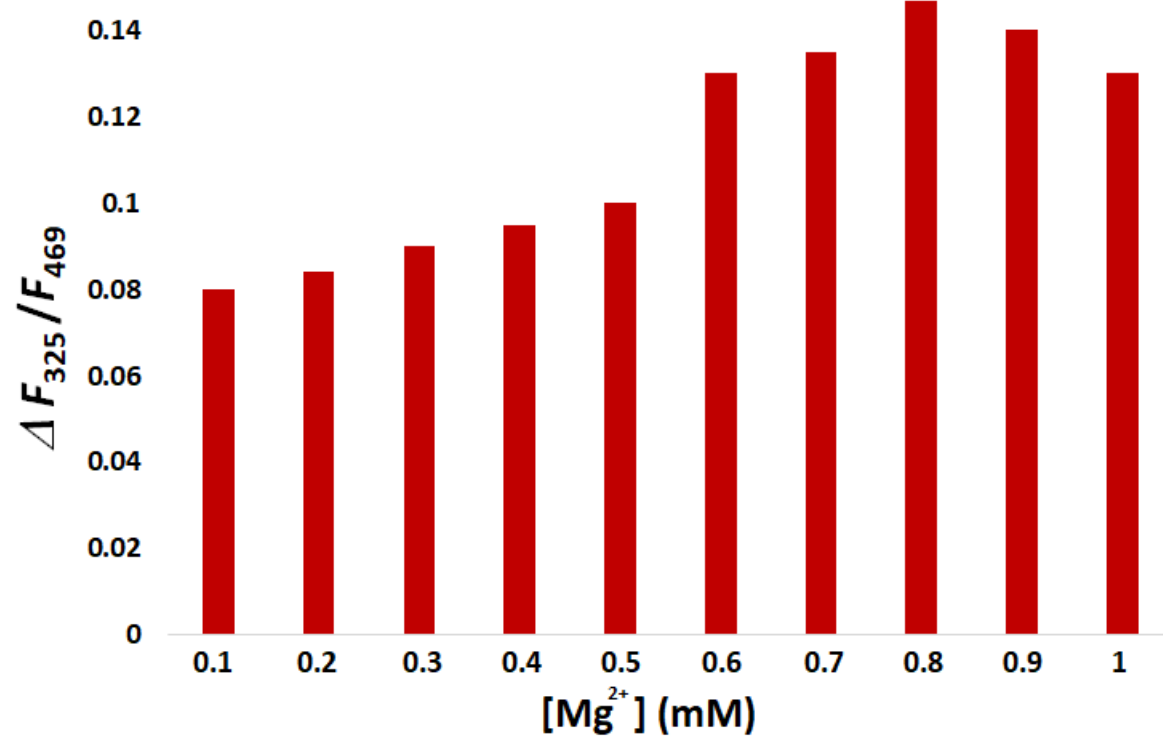


Fig. S5. The change in F_{325}/F_{469} ratio of probe 5 (10 μM) in the presence of ATP (10 μM) and various concentrations of Mg^{2+} (0.1-1 mM).

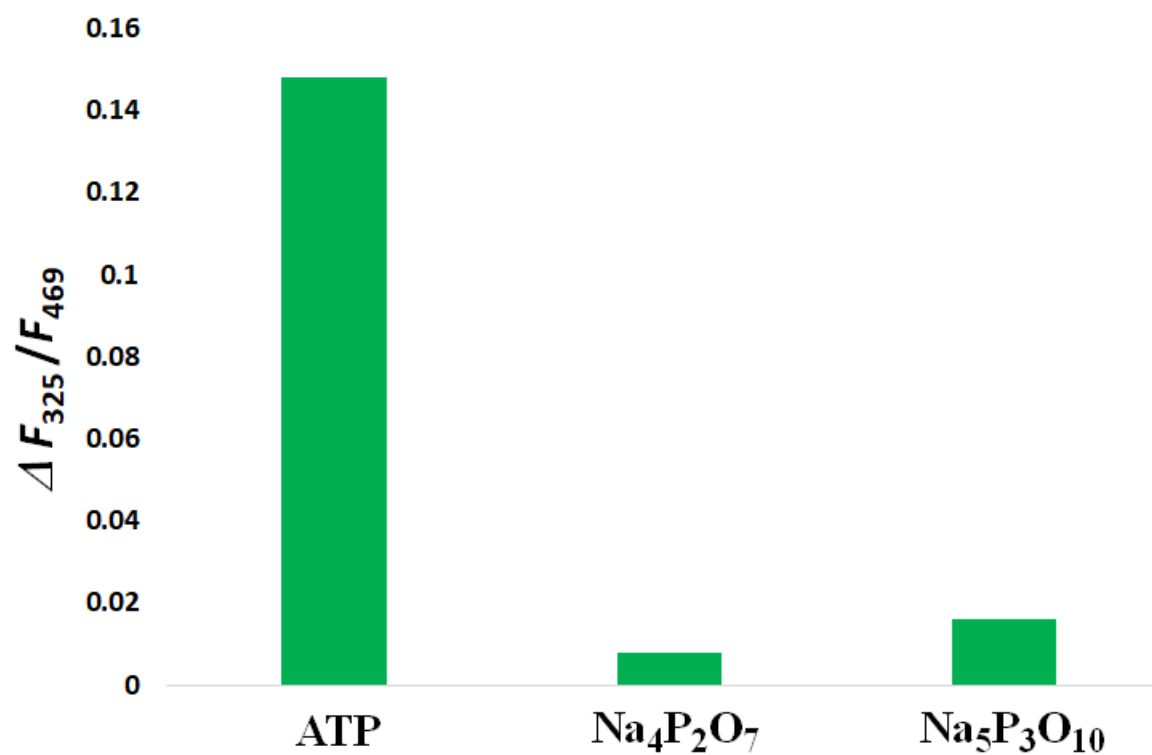


Fig. S6. The change in F_{325}/F_{469} ratio of probe 5 (10 μM) in the presence of (10 μM) of ATP, sodium diphosphate and sodium triphosphate.

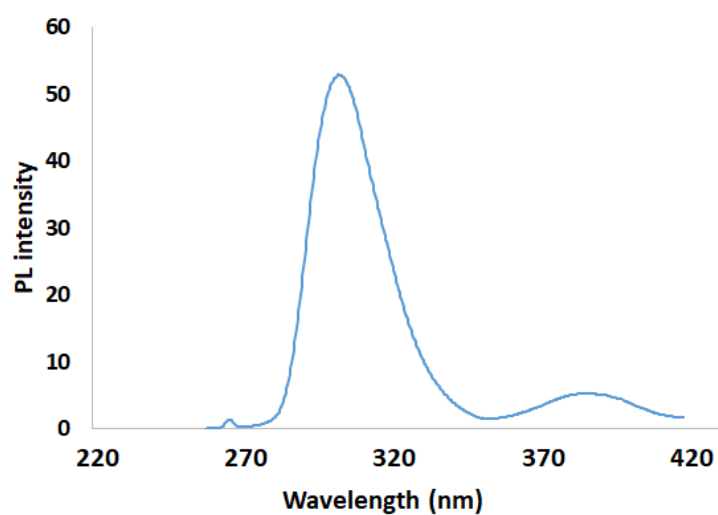


Fig. S7. Absorption spectrum of 5 (10 μM).

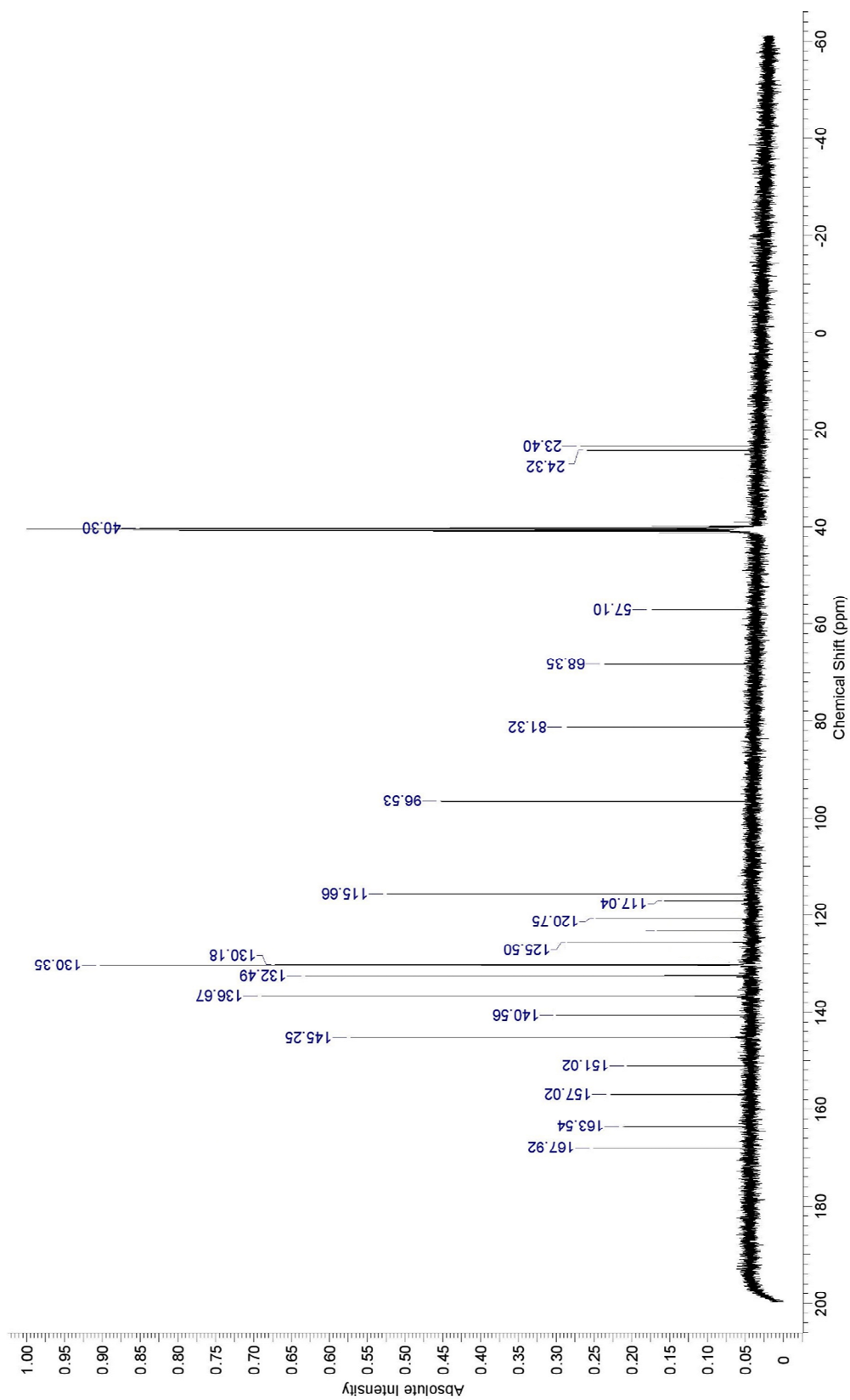


Fig. S8. ¹³C NMR spectrum of compound 5.