

Supplementary Information

A dual-function chromogenic and fluorogenic benzofurazan probe for plazomicin and its innovative utility for development of two microwell assays with high through for analysis of drug substance and pharmaceutical formulations

Fai A. Alkathiri^{1*}, Majed Al-Outaibi², Ibrahim A. Darwish²

¹ Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh 11451, Saudi Arabia.

² Department of Pharmaceutical Chemistry, College of Pharmacy, King Saud University, P.O. Box 2457, Riyadh 11451, Saudi Arabia.

* Correspondence author at: Department of Pharmaceutics, College of Pharmacy, King Saud University, P.O. Box 2457, Riyadh 11451, Saudi Arabia. E-mail address: falkathire@@ksu.edu.sa; Tel: +966-118052392; Fax: +966-114677200.

Table 1S. The improvement of the proposed assay over the reported methodologies for PLZ.

Parameter	Proposed assays	Reported methodologies
Sample	Drug substance	Drug substance and pharmaceutical formulation
Instrument	HPLC	A multi-mode microplate reader
Detection mode	On-line mass detector	Visible light absorbance and fluorescence
Instrument cost	High	Low
Analysis type	Sequential	Batch
Analysis convenience	Complex and instrumental intensive	Very convenient
Analysis throughput	Low (3 samples/hour)	High (1152 samples/hour)
Eco-friendly/Greenness	Not eco-friendly/not green	Eco-friendly/green