## Accepted Manuscript

Title: Encapsulation and Modulation of Protolytic Equilibrium of  $\beta$ -carboline-based Norharmane Drug by Cucurbit[7]uril and Micellar Environments for Enhanced Cellular Uptake

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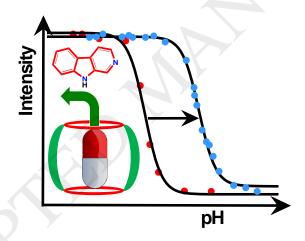
### ACCEPTED MANUSCRIPT

# Encapsulation and Modulation of Protolytic Equilibrium of $\beta$ carboline-based Norharmane Drug by Cucurbit[7]uril and Micellar Environments for Enhanced Cellular Uptake

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#### **Graphical Abstract:**



# Highlights

- Micellar environments and cucurbit[7]uril binding modulate  $pK_a$  of Norharmane (NHM)
- Large positive  $pK_a$  shift imparts a remarkable effect on NHM photophysics
- Encapsulation-induced protonation of NHM significantly enhances aqueous solubility

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