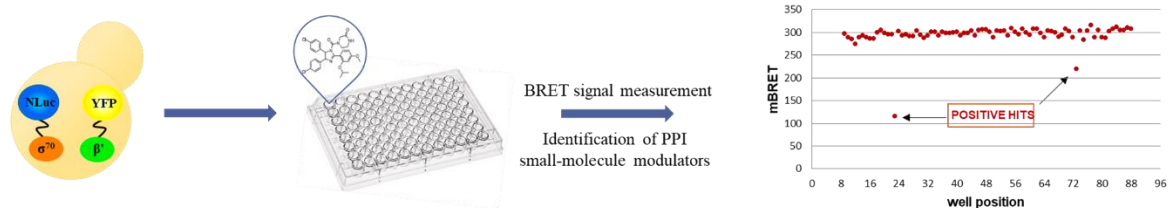
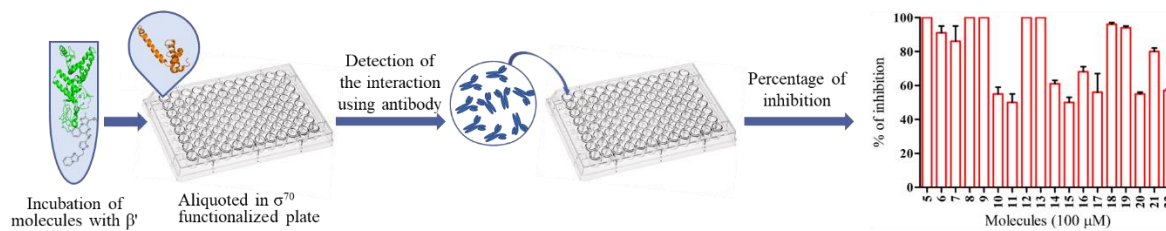


**Figure S1.** RNA polymerase  $\beta'$ - $\sigma^{70}$  PPI interaction inhibitors.

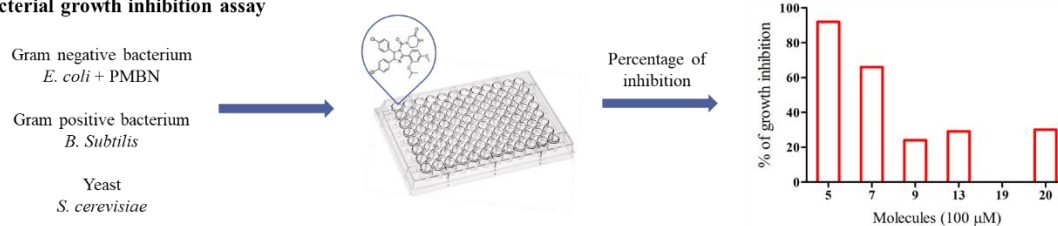
### 1. yBRET screening



### 2. In vitro competitive ELISA

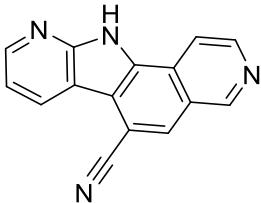
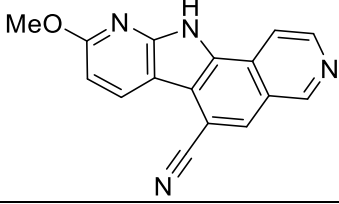
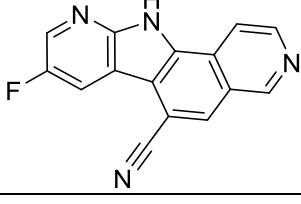
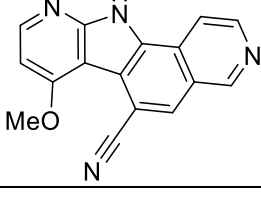
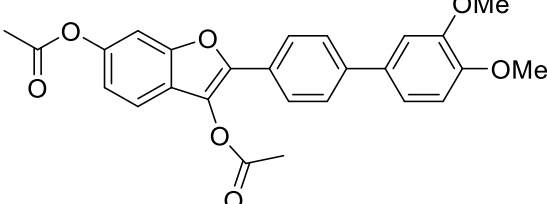
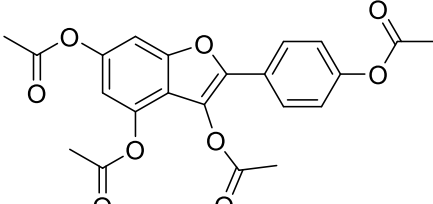
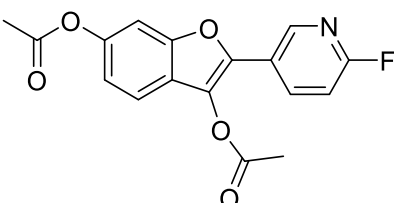


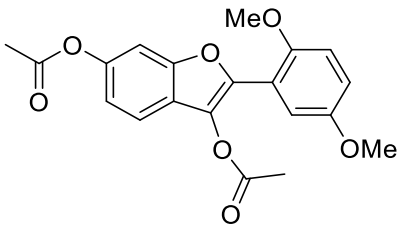
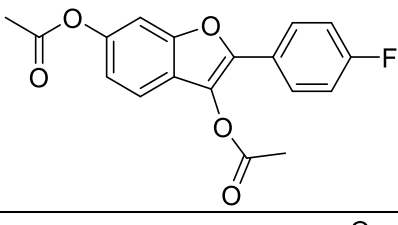
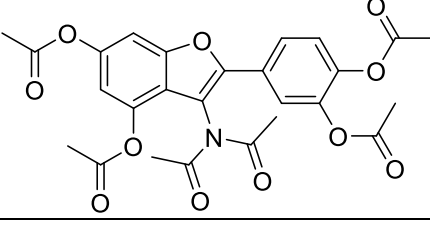
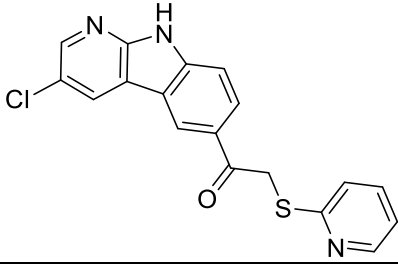
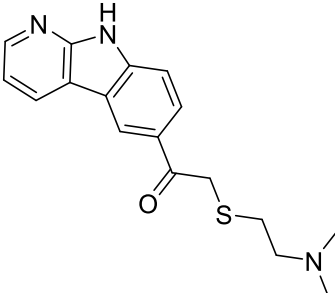
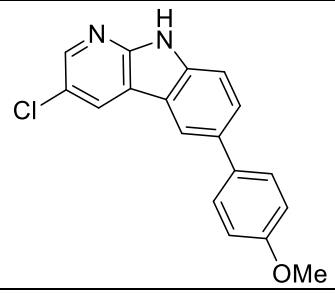
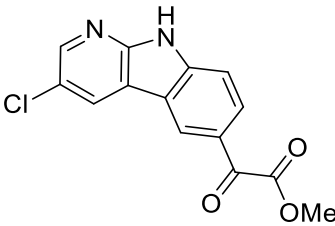
### 3. Bacterial growth inhibition assay

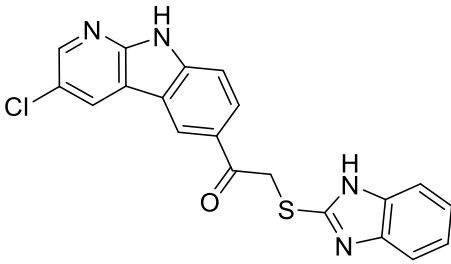
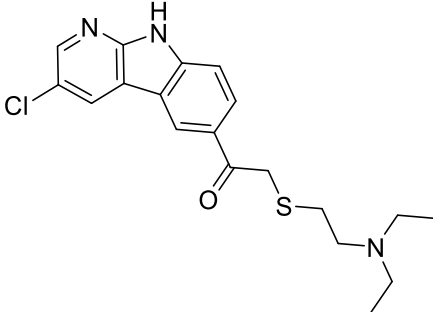
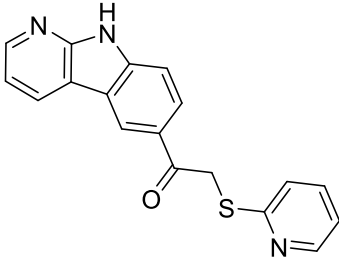
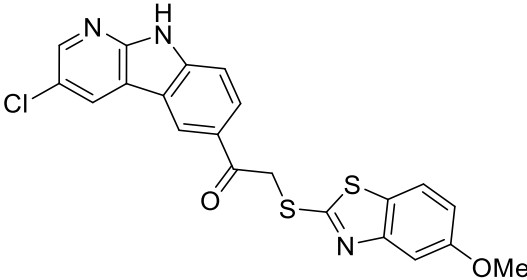


**Figure S2.** Visual scheme representing the drug-discovery workflow.

**Table S1.**  $\beta'$ - $\sigma^{70}$  binding inhibition of  $\gamma$ BRET-selected compounds measured through ELISA assay performed at a fixed concentration of 100  $\mu$ M. Data are the mean of three replicates; SD is reported.

Library	Molecule	Structure	ELISA 100 $\mu$ M
ReCC	5		100
	6		91 $\pm$ 4
	7		86 $\pm$ 9
	8		100
ICMBS	9		100
	10		55 $\pm$ 4
	11		50 $\pm$ 5

Library	Molecule	Structure	ELISA 100μM
	12		100
	13		100
	14		61±2
PKRC	15		50±3
	16		68±3
	17		56±11
	18		96±1

Library	Molecule	Structure	ELISA 100μM
	19		94±1
	20		55±1
	21		80±2
	22		57±1