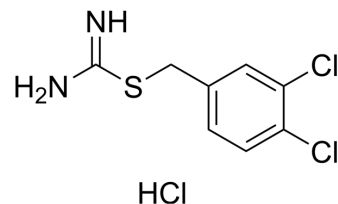


## MreB Perturbing Compound A22 hydrochloride

<b>Cat. No.:</b>	HY-118773		
<b>CAS No.:</b>	22816-60-0		
<b>Molecular Formula:</b>	C <sub>8</sub> H <sub>9</sub> Cl <sub>2</sub> N <sub>2</sub> S		
<b>Molecular Weight:</b>	271.59		
<b>Target:</b>	Bacterial; Antibiotic		
<b>Pathway:</b>	Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 20 mg/mL (73.64 mM)  
 DMF : ≥ 20 mg/mL (73.64 mM)  
 Ethanol : ≥ 1 mg/mL (3.68 mM)  
 \* "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.6820 mL	18.4101 mL	36.8202 mL
	5 mM	0.7364 mL	3.6820 mL	7.3640 mL
	10 mM	0.3682 mL	1.8410 mL	3.6820 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

MreB Perturbing Compound A22 hydrochloride is a benzylisothiourethane compound that interacts with the ATP binding site of MreB rapidly and reversibly. MreB Perturbing Compound A22 hydrochloride blocks normal rod shape formation and inhibits chromosome partitioning in *E. coli*, inhibiting growth (MIC=3.1 µg/ml).

### REFERENCES

- [1]. Zemer Gitai, et al. MreB actin-mediated segregation of a specific region of a bacterial chromosome. *Cell*. 2005 Feb 11;120(3):329-41.
- [2]. Noritaka Iwai, et al. Novel S-benzylisothiourethane compound that induces spherical cells in *Escherichia coli* probably by acting on a rod-shape-determining protein(s) other than penicillin-binding protein 2. *Biosci Biotechnol Biochem*. 2002 Dec;66(12):2658-62.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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