## Data Sheet (Cat.No.T10222)



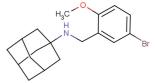
#### **ABMA**

## **Chemical Properties**

CAS No.: 332108-65-3 Formula: C18H24BrNO

Molecular Weight: 350.29
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

Description	ABMA is a broad-spectrum inhibitor of intracellular toxins and pathogens. ABMA efficiently protects cells against various pathogens including viruses, intracellular bacteria, and parasite. ABMA selectively acts at host cell late endosomes rather than targeting toxin or pathogen itself.			
Targets(IC <sub>50</sub> )	Parasite: None			
In vitro	ABMA protects cells against four bacterial toxins (Corynebacterium diphtheriae (DT; EC50 of 62.9 $\mu$ M), Bacillus anthracis (LT), Clostridium difficile toxin B (TcdB; EC50 of 73.3 $\mu$ M), Clostridium sordellii lethal toxin (TcsL; EC50 of 86.7 $\mu$ M)), three viruses (Ebola (EC50 of 3.3 $\mu$ M), rabies (EC50 of 19.4 $\mu$ M), dengue-4 virus (EC50 of 8.2 $\mu$ M)), two species of Chlamydiales intracellular bacteria (Simkania negevensis and Chlamydia trachomatis), and the parasite Leishmania infantum (EC50 of 7.1 $\mu$ M) at the micromolar level. In A549 cells, ABMA treatment induces a decrease in ricin cytotoxicity with an EC50 of 3.8 $\mu$ M and a protection factor (R) at 30 $\mu$ M ranging from 5 to 10. ABMA retained almost 100% of its biological activity against ricin-induced cytotoxicity up to six days [1].			
In vivo	ABMA (2-200 mg/kg; i.p.; female BALB/c mice) treatment protects mice from nasal instillation of an LD90 of ricin.			

# **Solubility Information**

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble	
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#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.855 mL	14.274 mL	28.548 mL
5 mM	0.571 mL	2.855 mL	5.71 mL
10 mM	0.285 mL	1.427 mL	2.855 mL
50 mM	0.057 mL	0.285 mL	0.571 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

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#### Reference

1. Wu Y, et al. ABMA, a small molecule that inhibits intracellular toxins and pathogens by interfering with late endosomal compartments.

2. Wu Y, et al. DABMA: A Derivative of ABMA with Improved Broad-Spectrum Inhibitory Activity of Toxins and Viruses. ACS Med Chem Lett. 2019 Jul 2;10(8):1140-1147.

#### Inhibitors · Natural Compounds · Compound Libraries

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