# **Product** Data Sheet

## **BLI-489 hydrate**

Cat. No.: HY-108062A
CAS No.: 2580120-08-5

Molecular Formula: C<sub>13</sub>H<sub>12</sub>N<sub>3</sub>NaO<sub>5</sub>S.xH<sub>2</sub>O

Target: Bacterial; Beta-lactamase

Pathway: Anti-infection

Storage: 4°C, sealed storage, away from moisture

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

#### **SOLVENT & SOLUBILITY**

In Vitro H<sub>2</sub>O: 20 mg/mL (Need ultrasonic and warming)

#### **BIOLOGICAL ACTIVITY**

**Description** BLI-489 hydrate, a penem β-lactamase inhibitor, is active against class A and class C as well as some class D β-lactamases.

The combination of Piperacillin and BLI-489 hydrate is efficacious against murine infections caused by class A (including

extended-spectrum  $\beta$ -lactamases), class C (AmpC), and class D  $\beta$ -lactamase-expressing pathogens [1][2].

In Vivo On the basis of preliminary results with various ratios, a dosing ratio of 8:1 was found to be optimal for retention of

enhanced efficacy. Piperacillin-BLI-489 dosed at an 8:1 ratio was efficacious against murine infections caused by class A (including extended-spectrum beta-lactamases), class C (AmpC), and class D beta-lactamase-expressing pathogens<sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **REFERENCES**

[1]. Petersen PJ, et al. Establishment of in vitro susceptibility testing methodologies and comparative activities of piperacillin in combination with the penem {beta}-lactamase inhibitor BLI-489. Antimicrob Agents Chemother. 2009;53(2):370-384.

[2]. Petersen PJ, et al. Efficacy of piperacillin combined with the Penem beta-lactamase inhibitor BLI-489 in murine models of systemic infection. Antimicrob Agents Chemother. 2009;53(4):1698-1700.

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

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