

116-9e

## Chemical Properties

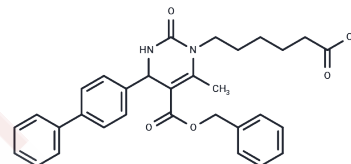
CAS No. : 831217-43-7

Formula: C<sub>31</sub>H<sub>32</sub>N<sub>2</sub>O<sub>5</sub>

Molecular Weight: 512.6

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

|               |  |
|---------------|--|
| Description   | 116-9e (MAL2-11B) is a potent Hsp70 co-chaperone DNAJA1 inhibitor with antiviral properties, inhibiting simian virus 40 (SV40) replication, tumour antigen (TAg) endogenous ATPase activity, and TAg-mediated activation of Hsp70. 116-9e can be used to study cancer drug resistance.                         |
| Targets(IC50) | HSP,DNA/RNA Synthesis,Virus Protease   |
| In vitro      | 116-9e (MAL2-11B) inhibits Hsp70 stimulated by TAg more effectively than MAL3-101, significantly reducing virus replication and DNA synthesis. MAL2-11B also inhibits the activity of the TAg ATPase domain[1].116-9e (MAL2-11B; 15 µM; 5 days) significantly decreases BK virus in human renal cell lines[2]. |

## Solubility Information

|                     |  |
|---------------------|--|
| Solubility          | DMSO: 260 mg/mL (507.22 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble)  |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (6.44 mM),Sonication is recommended.<br><i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i> |

### Preparing Stock Solutions

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|       | 1mg       | 5mg       | 10mg       |
|-------|-----------|-----------|------------|
| 1 mM  | 1.9508 mL | 9.7542 mL | 19.5084 mL |
| 5 mM  | 0.3902 mL | 1.9508 mL | 3.9017 mL  |
| 10 mM | 0.1951 mL | 0.9754 mL | 1.9508 mL  |
| 50 mM | 0.039 mL  | 0.1951 mL | 0.3902 mL  |

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Nitika, et al. Chemogenomic screening identifies the Hsp70 co-chaperone DNAJA1 as a hub for anticancer drug resistance. *Sci Rep.* 2020 Aug 14;10(1):13831.

Christine M Wright, et al. Inhibition of Simian Virus 40 replication by targeting the molecular chaperone function and ATPase activity of T antigen. *Virus Res.* 2009 Apr;141(1):71-80.

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