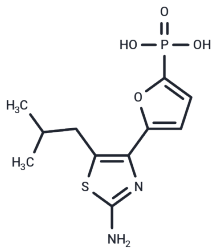
# Data Sheet (Cat.No.T16020)

MB05032

## Chemical Properties



CAS No. : 261365-11-1

Formula: C11H15N2O4PS

Molecular Weight: 302.29

Storage: Store at low temperature
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 | MB05032 is a potent fructose-,-bisphosphatase inhibitor that inhibits gluconeogenesis and reduces d-lactate-triggered ETosis. |
| Targets(IC50) | Others,Phosphatase |
| In vivo | **METHODS**: To investigate the therapeutic effect of MB05032 on gluconeogenesis in type 2 diabetes, MB05032 was orally administered at different doses (3-300 mg/kg; once) to young and aged ZDF rats.<br>**RESULTS**: MB05032 resulted in a dose-dependent decrease in blood glucose levels. |

## Solubility Information

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|---|---|
| Solubility | DMSO: 40 mg/mL (132.32 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: 2 mg/mL (6.62 mM),Sonication is recommended.<br>*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.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.3081 mL | 16.5404 mL | 33.0808 mL |
| 5 mM | 0.6616 mL | 3.3081 mL | 6.6162 mL |
| 10 mM | 0.3308 mL | 1.654 mL | 3.3081 mL |
| 50 mM | 0.0662 mL | 0.3308 mL | 0.6616 mL |

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

Erion MD, et al. MB06322 (CS-917): A potent and selective inhibitor of fructose 1,6-bisphosphatase for controlling gluconeogenesis in type 2 diabetes. Proc Natl Acad Sci U S A. 2005 May 31;102(22):7970-5.
Zhang Y, et al. Fructose-1,6-bisphosphatase regulates glucose-stimulated insulin secretion of mouse pancreatic beta-cells. Endocrinology. 2010 Oct;151(10):4688-95.



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