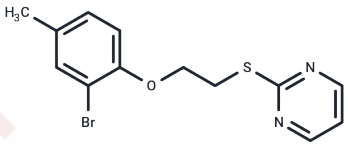
# Data Sheet (Cat.No.T13411)

TargetMol

ZLN024

## Chemical Properties



CAS No. : 723249-01-2

Formula: C13H13BrN2OS

Molecular Weight: 325.22

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 | ZLN024 is an activator of AMPK allosteric. ZLN024 allosterically stimulates active AMPK heterotrimers and the inactive α1 subunit truncations α1 (1-394) and α1 (1-335) but not α1 (1-312). |
| Targets(IC50) | AMPK |
| In vitro | ZLN024 allosterically stimulates active AMPK heterotrimers and the inactive α1 subunit truncations α1 (1-394) and α1 (1-335) but not α1 (1-312). It increases the activity of α1β1γ1 by 1.5-fold with an EC50 of 0.42 μM, α2β1γ1 by 1.7-fold with an EC50 of 0.95 μM, recombinant AMPK α1β2γ1 by 1.7-fold with an EC50 of 1.1 μM, and AMPK α2β2γ1 by 1.6-fold with an EC50 of 0.13 μM. |
| In vivo | C57BKS db/db mice are administered a 15 mg/kg/day dose of ZLN024 by daily gavage for 5 weeks; 250 mg/kg/day Metformin (Met) is used as a positive control. After 4 weeks of treatment, ZLN024 improves glucose tolerance, reduces fasting blood glucose by 15%, and decreases liver tissue weight, triacylglycerol, and total cholesterol content. |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 50 mg/mL (153.74 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.0748 mL | 15.3742 mL | 30.7484 mL |
| 5 mM | 0.615 mL | 3.0748 mL | 6.1497 mL |
| 10 mM | 0.3075 mL | 1.5374 mL | 3.0748 mL |
| 50 mM | 0.0615 mL | 0.3075 mL | 0.615 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

Zhang LN, et al. Novel small-molecule AMP-activated protein kinase allosteric activator with beneficial effects in db/db mice. PLoS One. 2013 Aug 20;8(8):e72092.