# M1001

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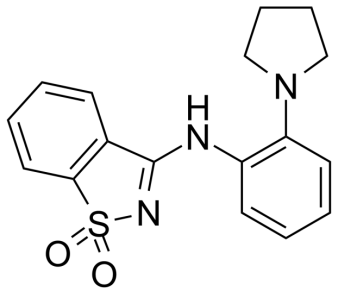
|---|---|
| **Cat. No.:** | HY-111547 |
| **CAS No.:** | 874590-32-6 |
| **Molecular Formula:** | $C_{17}H_{17}N_3O_2S$ |
| **Molecular Weight:** | 327.4 |
| **Target:** | HIF/HIF Prolyl-Hydroxylase |
| **Pathway:** | Metabolic Enzyme/Protease |
| **Storage:** | Powder -20°C 3 years<br>4°C 2 years<br>In solvent -80°C 2 years<br>-20°C 1 year |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 250 mg/mL (763.59 mM; Need ultrasonic)

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 3.0544 mL | 15.2718 mL | 30.5437 mL |
| 5 mM | 0.6109 mL | 3.0544 mL | 6.1087 mL |
| 10 mM | 0.3054 mL | 1.5272 mL | 3.0544 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.33 mg/mL (7.12 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

M1001 is a weak hypoxia-inducible factor-2α (HIF-2α) agonist. M1001 can bind to the HIF-2α PAS-B domain, with a $K_d$ of 667 nM. M1001 can be used in chronic kidney disease research[1].

**$IC_{50}$ & Target**

Kd: 667 nM (HIF-2α)[1]

**In Vitro**

M1001 (10 μM) treatment shows increased expression of HIF-2 target genes in 786-O cells[1].
M1001 (10 μM) binds to HIF-2α and has the properties of a weak agonist[1].
M1001 (1-10 μM) reduces VHL binding to HIF-2α[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

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|---|---|
| Cell Line: | 786-O cells |
| Concentration: | 10 μM |
| Incubation Time: | |
| Result: | Increased the expression of HIF-2 target genes modestly in 786-O cells. |

Western Blot Analysis[1]

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|---|---|
| Cell Line: | HEK293T cells |
| Concentration: | 1 and 10 μM |
| Incubation Time: | |
| Result: | Reduced the physical association between HIF-2α and VHL. |

## REFERENCES

[1]. Wu D, et al. Bidirectional modulation of HIF-2 activity through chemical ligands. Nat Chem Biol. 2019 Feb 25.



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