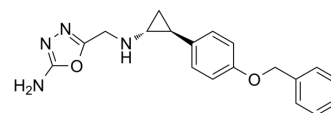


## Vafidemstat

|                    |                                                                                  |
|--------------------|----------------------------------------------------------------------------------|
| Cat. No.:          | HY-112623                                                                        |
| CAS No.:           | 1357362-02-7                                                                     |
| Molecular Formula: | C <sub>19</sub> H <sub>20</sub> N <sub>4</sub> O <sub>2</sub>                    |
| Molecular Weight:  | 336.39                                                                           |
| Target:            | Histone Demethylase; Monoamine Oxidase                                           |
| Pathway:           | Epigenetics; Neuronal Signaling                                                  |
| Storage:           | Powder    -20°C    3 years<br>In solvent   -80°C    6 months<br>-20°C    1 month |



### SOLVENT & SOLUBILITY

|                                                                               |                                                                                                                                                            |                                                                      |           |            |            |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------|------------|------------|
| In Vitro                                                                      | DMSO : 50 mg/mL (148.64 mM; Need ultrasonic)                                                                                                               |                                                                      |           |            |            |
|                                                                               | Preparing Stock Solutions                                                                                                                                  | <div><div>Solvent</div><div>Concentration</div><div>Mass</div></div> | 1 mg      | 5 mg       | 10 mg      |
|                                                                               |                                                                                                                                                            | 1 mM                                                                 | 2.9727 mL | 14.8637 mL | 29.7274 mL |
|                                                                               |                                                                                                                                                            | 5 mM                                                                 | 0.5945 mL | 2.9727 mL  | 5.9455 mL  |
|                                                                               |                                                                                                                                                            | 10 mM                                                                | 0.2973 mL | 1.4864 mL  | 2.9727 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<br>Solubility: 5 mg/mL (14.86 mM); Suspended solution; Need ultrasonic |                                                                      |           |            |            |
|                                                                               | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)<br>Solubility: 5 mg/mL (14.86 mM); Suspended solution; Need ultrasonic            |                                                                      |           |            |            |
|                                                                               | 3. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 5 mg/mL (14.86 mM); Clear solution                                               |                                                                      |           |            |            |
|                                                                               |                                                                                                                                                            |                                                                      |           |            |            |

### BIOLOGICAL ACTIVITY

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description               | Vafidemstat (ORY-2001) is an oral, brain penetrant, dual lysine-specific histone demethylase (LSD1)/MAO-B inhibitor <sup>[1]</sup> .                                                                                                                                                                                                                                                                                                                                         |
| IC <sub>50</sub> & Target | LSD1/MAO-B <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| In Vitro                  | Vafidemstat (ORY-2001), a dual LSD1/MAO-B inhibitor, is a novel epigenetic agent for the treatment of neurodegenerative diseases. LSD1 is a protein that participates in transcription regulation complexes; its modulation can be used to tweak transcriptional imbalances in neurodegenerative disease and redress neuroinflammation and cognitive deficit <sup>[1]</sup> .<br>Vafidemstat (ORY-2001) can be used in the treatment of Alzheimer's disease <sup>[2]</sup> . |

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

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## REFERENCES

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- [1]. ORYZON presents data on the Phase I trial with ORY-2001 at the 13th International Conference on Alzheimer's and Parkinson's diseases
- [2]. ORYZON Reports Financial Results and Corporate Update for the 1st Half Ended June 30, 2018.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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