Screening Libraries

VU0529331

Cat. No.: HY-112705 CAS No.: 1286725-49-2 Molecular Formula: $C_{22}H_{20}N_{6}O$ Molecular Weight: 384.43

Potassium Channel Target:

Pathway: Membrane Transporter/Ion Channel

In solvent

Storage: Powder -20°C 3 years

> -80°C 6 months

-20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 5 mg/mL (13.01 mM; Need ultrasonic and warming)

| Preparing Stock Solutions | Solvent Mass Concentration | 1 mg | 5 mg | 10 mg |
|------------------------------|-------------------------------|-----------|------------|------------|
| | 1 mM | 2.6013 mL | 13.0063 mL | 26.0125 mL |
| | 5 mM | 0.5203 mL | 2.6013 mL | 5.2025 mL |
| | 10 mM | 0.2601 mL | 1.3006 mL | 2.6013 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: ≥ 1.25 mg/mL (3.25 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.25 mg/mL (3.25 mM); Clear solution

BIOLOGICAL ACTIVITY

| Description | VU0529331 is a modestly selective non-GIRK1-containing G protein-gated, inwardly-rectifying, potassium channel (non-GIRK1/X) activator, with EC $_{50}$ s of 5.1 μ M and 5.2 μ M for GIRK2 and GIRK1/2 in HEK293 cells, respectively, also effective on GIRK4 homomeric channel [1]. |
|---------------------------|--|
| IC ₅₀ & Target | EC50: 5.1 μ M (GIRK2), 5.2 μ M (GIRK1/2) $^{[1]}$ |

REFERENCES

[1]. Kozek KA, et al. Discovery and Characterization of VU0529331, a Synthetic Small-Molecule Activator of Homomeric G Protein-Gated, Inwardly Rectifying, Potassium

(GIRK) Channels. ACS Chem Neurosci. 2018 Sep 13.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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