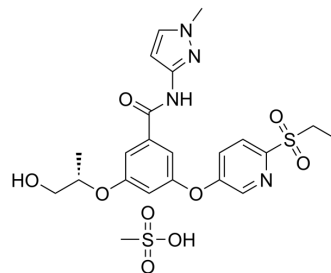


MK-0941

| | |
|--------------------|--|
| Cat. No.: | HY-19843 |
| CAS No.: | 1137916-97-2 |
| Molecular Formula: | C ₂₂ H ₂₈ N ₄ O ₉ S ₂ |
| Molecular Weight: | 556.61 |
| Target: | Glucokinase |
| Pathway: | Metabolic Enzyme/Protease |
| Storage: | 4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



SOLVENT & SOLUBILITY

| | | | | | |
|---|---|--------------------------|-----------|-----------|------------|
| In Vitro | DMSO : 100 mg/mL (179.66 mM; Need ultrasonic) | | | | |
| | | Solvent Concentration | Mass | | |
| | Preparing Stock Solutions | | 1 mg | 5 mg | 10 mg |
| | | 1 mM | 1.7966 mL | 8.9830 mL | 17.9659 mL |
| | | 5 mM | 0.3593 mL | 1.7966 mL | 3.5932 mL |
| | 10 mM | 0.1797 mL | 0.8983 mL | 1.7966 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: ≥ 2.17 mg/mL (3.90 mM); Clear solution | | | | |
| | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.17 mg/mL (3.90 mM); Clear solution | | | | |
| | 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.17 mg/mL (3.90 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|---------------------------|--|
| Description | MK-0941 is a potent, orally active and allosteric glucokinase activator, with EC ₅₀ s of 240 and 65 nM for recombinant human glucokinase in the presence of 2.5 and 10 mM glucose, respectively. MK-0941 has potential in the treatment of type 2 diabetes ^[1] . |
| IC ₅₀ & Target | EC ₅₀ : 240 nM (Recombinant human glucokinase, 2.5 mM glucose), 65 nM (Recombinant human glucokinase, 10 mM glucose) [1] |

REFERENCES

[1]. Eiki J, et al. Pharmacokinetic and pharmacodynamic properties of the glucokinase activator MK-0941 in rodent models of type 2 diabetes and healthy dogs. Mol Pharmacol. 2011 Dec;80(6):1156-65.

Caution: Product has not been fully validated for medical applications. For research use only.

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