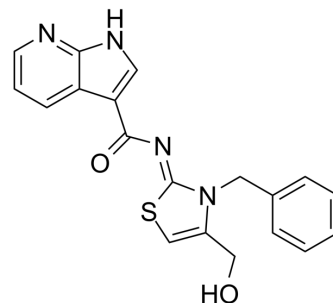


TDI-011536

| | | | |
|--------------------|---|-------|----------|
| Cat. No.: | HY-150042 | | |
| CAS No.: | 2687970-96-1 | | |
| Molecular Formula: | C ₁₉ H ₁₆ N ₄ O ₂ S | | |
| Molecular Weight: | 364.42 | | |
| Target: | YAP | | |
| Pathway: | Stem Cell/Wnt | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 6 months |
| | | -20°C | 1 month |



SOLVENT & SOLUBILITY

| | | | | | |
|---|---|--------------------------|--------------|------------|------------|
| In Vitro | DMSO : 125 mg/mL (343.01 mM; Need ultrasonic) | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 2.7441 mL | 13.7204 mL | 27.4409 mL |
| | | 5 mM | 0.5488 mL | 2.7441 mL | 5.4882 mL |
| | | 10 mM | 0.2744 mL | 1.3720 mL | 2.7441 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: ≥ 2.08 mg/mL (5.71 mM); Clear solution | | | | |
| | 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.71 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|---------------------------|---|
| Description | TDI-011536 is a potent Lats kinase inhibitor, interrupts Hippo-Yap signaling and initiates the proliferation of lesioned heartmuscle cells. TDI-011536 can be used in studies of organ conservation and regeneration ^[1] . |
| IC ₅₀ & Target | Lats kinase ^[1] . |
| In Vitro | TDI-011536 (3 μM; 24 h) reduces Yap phosphorylation and (3 μM; 5 days) induces proliferation of Müller glia in human retinal organoids ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Proliferation Assay ^[1] |

| | | |
|---------|--|---|
| | Cell Line: | human retinal organoids |
| | Concentration: | 3 μ M |
| | Incubation Time: | 24 h, 5 days |
| | Result: | Supressed Yap phosphorylation and promoted Müller glia proliferation. |
| In Vivo | <p>TDI-011536 (200 mg/kg; i.p.; once) provides over 4 h of Lats inhibition in the liver, heart, and skin and reduces the amount of pYap for at least 4 h after injection in all three organs^[1].</p> <p>TDI-011536 (100 mg/kg; i.p.; once daily for 2 or 3 days) shows proliferative effect on cardiomyocytes^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> | |
| | Animal Model: | Living mice (immunoblot analysis of the heart, liver, and skin immediately after injection) ^[1] . |
| | Dosage: | 200 mg/kg |
| | Administration: | Intraperitoneal injections; once. |
| | Result: | Reduced the amount of pYap for at least 4 h after injection in all three organs and the levels returned to control values within a day. |
| | Animal Model: | Male 8-week-old mice (cryolesion model) ^[1] . |
| | Dosage: | 100 mg/kg |
| | Administration: | Intraperitoneal injections; once daily for 2 or 3 days. |
| | Result: | Promoted cardiomyocytes proliferation. |

REFERENCES

[1]. Kastan NR, et al. Development of an improved inhibitor of Lats kinases to promote regeneration of mammalian organs. Proc Natl Acad Sci U S A. 2022 Jul 12;119(28):e2206113119.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA