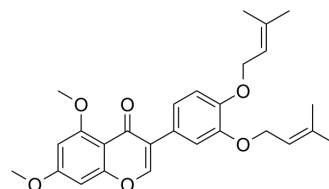


Glabrescione B

| | | | |
|--------------------|--|-------|----------|
| Cat. No.: | HY-122590 | | |
| CAS No.: | 65893-94-9 | | |
| Molecular Formula: | C ₂₇ H ₃₀ O ₆ | | |
| Molecular Weight: | 450.52 | | |
| Target: | Gli | | |
| 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 : 100 mg/mL (221.97 mM; Need ultrasonic) | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 2.2197 mL | 11.0983 mL | 22.1966 mL |
| | | 5 mM | 0.4439 mL | 2.2197 mL | 4.4393 mL |
| 10 mM | | 0.2220 mL | 1.1098 mL | 2.2197 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: 2.5 mg/mL (5.55 mM); Suspended solution; Need ultrasonic | | | | |
| | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (5.55 mM); Suspended solution; Need ultrasonic | | | | |
| | 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.55 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|---------------------------|---|
| Description | Glabrescione B is the first compound that binds the Hedgehog (Hh) modulator Gli1. Glabrescione B impairs its activity by interfering with Gli1-DNA interaction. Glabrescione B inhibits the growth of Hedgehog-dependent tumor cells, the self-renewal ability, and clonogenicity of tumor-derived stem cells ^{[1][2]} . |
| IC ₅₀ & Target | Gli1-DNA Interaction ^[1] |
| In Vitro | Glabrescione B (5 μM; 24-72 hours) inhibits the growth of Gli-dependent basal cell carcinoma ^[2] . |

Glabrescione B (1-10 μ M; 24-48 hours) decreases Gli1 mRNA expression levels^[2].

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

Cell Proliferation Assay^[1]

| | |
|------------------|---|
| Cell Line: | ASZ001 BCC cells |
| Concentration: | 5 μ M |
| Incubation Time: | 24-72 hours |
| Result: | Basal cell carcinoma cell proliferation was impaired. |

Western Blot Analysis^[1]

| | |
|------------------|--|
| Cell Line: | ASZ001 BCC cells |
| Concentration: | 1-10 μ M |
| Incubation Time: | 24-48 hours |
| Result: | Gli1 mRNA expression levels was decreased. |

REFERENCES

[1]. Ingallina C, et al. Polymeric glabrescione B nanocapsules for passive targeting of Hedgehog-dependent tumor therapy in vitro. *Nanomedicine (Lond)*. 2017;12(7):711-728.

[2]. Infante P, et al. Gli1/DNA interaction is a druggable target for Hedgehog-dependent tumors. *EMBO J*. 2015;34(2):200-217.

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