DS18561882

Cat. No.: HY-130251
CAS No.: 2227149-22-4
Molecular Formula: C₂₈H₃₁F₃N₄O₆S
Molecular Weight: 608.63
Target: Others
Pathway: Others
Storage: Please store the product under the recommended conditions in the COA.

**BIOLOGICAL ACTIVITY**

**Description**
DS18561882 is a highly potent, isozyme-selective methylenetetrahydrofolate dehydrogenase 2 (MTHFD2) inhibitor with an IC₅₀ value of 0.0063 μM. DS18561882 also has inhibitory effect on MTHFD1 (IC₅₀=0.57 μM). DS18561882 exhibits a good oral pharmacokinetic profile[1].

**IC₅₀ & Target**
IC₅₀: 0.0063 μM (MTHFD2); 0.57 μM (MTHFD1)[1]

**In Vitro**
DS18561882 (0-150 nM) gives the lowest GI₅₀ value (140 nM) against the MDA-MB-231 cell line[1].

**In Vivo**
DS18561882 (oral administration; 30, 100 or 300 mg/kg; twice daily) inhibits tumor growth inhibition with a dose-dependent manner; the tumor is completely inhibited (TGI: 67%) at the dose of 300 mg/kg in mice[1]. DS18561882 (oral administration; 10, 30, 100, or 300 mg/kg) has a good oral pharmacokinetic profile, including ACU (64.6, 264, 726 μg.h/ml); Cₘₐₓ (11.4, 56.5, 90.1 μg/ml); t₁/₂ (2.21, 2.16, 2.32 hours) for 30 mg/kg; 100mg/kg; 200 mg/kg, respectively[1]. DS18561882 is suspended in a 0.5% (w/v) methyl cellulose 400 solution in this article[1].

Animal Model:
Five week old female BALB/cAcl-νu/νu mice with MDA-MB-231 luc tumor cells (4 × 10⁶ cells/mouse)[1]

Dosage: 30, 100 or 300 mg/kg
Administration: Oral administration; 30, 100 or 300 mg/kg; twice daily; until day 11
Result: Suppressed tumor growth in a dose-dependent manner.

**REFERENCES**

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