# Product data sheet

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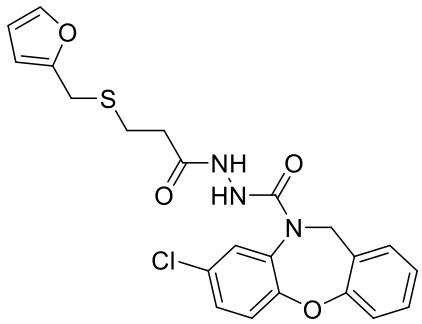
|---|---|
| MedKoo Cat#: 532687<br>Name: SC-51322<br>CAS#: 146032-79-3<br>Chemical Formula: C22H20ClN3O4S<br>Exact Mass: 457.0863<br>Molecular Weight: 457.93 |  |
| Product supplied as: | Powder |
| Purity (by HPLC): | ≥ 98% |
| Shipping conditions | Ambient temperature |
| Storage conditions: | Powder: -20°C 3 years; 4°C 2 years. |
| | In solvent: -80°C 3 months; -20°C 2 weeks. |

**1. Product description:**
SC-51322 is a selective EP1 antagonist that inhibits PGE2 signaling in a guinea pig ileum muscle strip assay with a pA2 value of 8.1 and demonstrates analgesic activity in a mouse writhing assay with an ED50 value of 0.9 mg/kg.

**2. CoA, QC data, SDS, and handling instruction**
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

**3. Solubility data**

| Solvent | Max Conc. mg/mL | Max Conc. mM |
|---|---|---|
| DMF | 20 | 43.67 |
| DMSO | 20 | 43.67 |
| Ethanol | 30 | 65.51 |

**4. Stock solution preparation table:**

| **Concentration / Solvent Volume / Mass** | **1 mg** | **5 mg** | **10 mg** |
|---|---|---|---|
| 1 mM | 2.18 mL | 10.92 mL | 21.84 mL |
| 5 mM | 0.44 mL | 2.18 mL | 4.37 mL |
| 10 mM | 0.22 mL | 1.09 mL | 2.18 mL |
| 50 mM | 0.04 mL | 0.22 mL | 0.44 mL |

**5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator**
Please refer the product web page under section of "Calculator"

**6. Recommended literature which reported protocols for in vitro and in vivo study**
In vitro study


1. Hallinan EA, Hagen TJ, Tsymbalov S, Husa RK, Lee AC, Stapelfeld A, Savage MA. Aminoacetyl moiety as a potential surrogate for diacylhydrazine group of SC-51089, a potent PGE2 antagonist, and its analogs. J Med Chem. 1996 Jan 19;39(2):609-13. doi: 10.1021/jm950454k. PMID: 8558534.
2. Hallinan EA, et, al. 8-chlorodibenz[b,f][1,4]oxazepine-10(11H)-carboxylic acid,2-[3-[2-(furanylmethyl)thio]-1-oxopropyl]hydrazide (SC-51322): A potent PGE2 antagonist and analgesic. Bioorganic & Medicinal Chemistry Letters. Feb 1994. 4(3): 509-514.


In vivo study

To be determined

**7. Bioactivity**
Biological target:

SC-51322 is an antagonist of the PGE2 receptor EP 1, with a pA2 of 8.1.

In vitro activity

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SC-51322 is a potent PGE2 antagonist (pA2 = 8.1) and analgesic (ED50 = 0.9 mg/kg). SC-51322 is the most potent PGE2 antagonist and analgesic that has been seen in the N-substituted dibenzoxazepines series.

Reference: Bioorganic & Medicinal Chemistry Letters. Feb 1994. https://doi.org/10.1016/0960-894X(94)80027-8.

In vivo activity

To determined

*Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.*