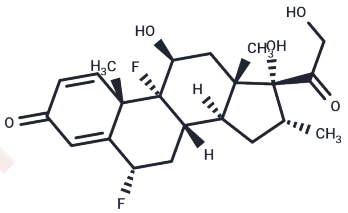
# Data Sheet (Cat.No.T1124)

TargetMol

## Flumethasone

### Chemical Properties



CAS No. : 2135-17-3

Formula: C22H28F2O5

Molecular Weight: 410.45

Storage: Keep away from moisture,Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | Flumethasone (RS-2177) is a glucocorticoid receptor agonist, with anti-inflammatory, antipruritic and vasoconstrictive properties. |
| Targets(IC50) | Glucocorticoid Receptor,Nrf2,Antifungal,Interleukin,TNF |
| In vitro | Flumethasone (5 mg) increased plasma glucose concentrations, decreased serum β-hydroxybutyric acid and urinary acetoacetate concentrations, and ameliorated uterine disease in calves with ketosis. In calves with severe acute bronchopneumonia, Flumethasone in combination with ceftiofur sodium returned physiologic parameters to normal levels and improved survival. |
| Kinase Assay | Topoisomerase I Cleavable Complex Assay: Topoisomerase I is isolated from calf thymus and is devoid of topoisomerase II. All reactions are carried out in 10 mL volumes of reaction buffer (50 mM Tris-HCl, pH 7.5, 100 mM KCl, 0.5 mM EDTA, and 30 pg/mL BSA) in microtiter plates. Camptothecin is dissolved in DMSO at 10 mg/mL and serially diluted in 96-well microtiter plates to which the 32P end-labeled pBR322 DNA and topoisomerase enzyme are added. The reaction mixture is incubated at room temperature for 30 min and then the reaction stopped by adding 2 mL of a mixture of sodium dodecyl sulfate and proteinase K (1.6% and 0.14 mg/mL final concentrations, respectively). The plates are heated at 50 °C for 30 min, 10 mL of standard stop mixture containing 0.45 N NaOH is added in order to generate single-stranded DNA, and the samples are electrophoresed in 1.5% agarose gels in TBE buffer. Gels are blotted on nitrocellulose paper, dried, and exposed to X-ray film. The units of cleavage are calculated from the autoradiographs and plotted against the log drug concentration. The IC50 values are then obtaine |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 55 mg/mL (134 mM),Sonication is recommended.<br>Ethanol: 6 mg/mL (14.62 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.87 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one.* |

| | |
|---|---|
| In vivo Formulation | *Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.4364 mL | 12.1818 mL | 24.3635 mL |
| 5 mM | 0.4873 mL | 2.4364 mL | 4.8727 mL |
| 10 mM | 0.2436 mL | 1.2182 mL | 2.4364 mL |
| 50 mM | 0.0487 mL | 0.2436 mL | 0.4873 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Sternbauer K, et al. Zentralbl Veterinarmed A, 1998, 45(6-7), 441-443.
Crystal structure of flumethasone, C22H28F2O5
Sustronck B, et al. Zentralbl Veterinarmed A, 1997, 44(3), 179-187.
Shpigel NY, et al. J Am Vet Med Assoc, 1996, 208(10), 1702-1704.
Van Den Hauwe O, et al. J Agric Food Chem, 2003, 51(1), 326-330.



Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481