**TargetMol**

## FR-188582

### Chemical Properties

| | |
|---|---|
| CAS No. : | 189699-82-9 |
| Formula : | C16H13ClN2O2S |
| Molecular Weight : | 332.8 |
| Appearance : | no data available |
| Storage : | Powder: -20°C for 3 years \| In solvent: -80°C for 1 year |
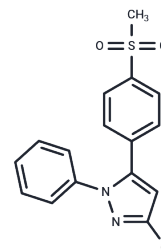
### Biological Description

| Description | FR-188582 is a highly selective cyclooxygenase (COX)-2 inhibitor [IC50: 17 nM]. |
|---|---|
| Targets(IC50) | COX |
| In vitro | FR-188582 inhibits COX-2 (IC50: 17 nM), in a recombinant human COX enzyme activity. The inhibition of prostaglandin (PG) E2 formation by FR188582 is over 6000 times more selective for COX-2 than COX-1. |
| In vivo | FR-188582 (0.01-3.2 mg/kg, p.o.) reverses paw edema in adjuvant arthritic rats and displays a therapeutic effect in a dose-dependent manner. For adjuvant-injected paws and adjuvant-uninjected paws, the ED50s values (95% C.L.) are 0.074 (0.00021-0.53) and 0.063 (0.0039-0.31) mg/kg , respectively. The anti-inflammatory effect of FR-188582 is threefold more potent than that of Indomethacin. For adjuvant-injected paws and adjuvant-uninjected paws, the ED50s values (95% C.L.) are 0.24 (0.047-1.8) and 0.20 (0.021-0.79) mg/kg, respectively. |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.0048 mL | 15.024 mL | 30.0481 mL |
| 5 mM | 0.601 mL | 3.0048 mL | 6.0096 mL |
| 10 mM | 0.3005 mL | 1.5024 mL | 3.0048 mL |
| 50 mM | 0.0601 mL | 0.3005 mL | 0.601 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.

Reference

Ochi T, et al. The anti-inflammatory effect of FR188582, a highly selective inhibitor of cyclooxygenase-2, with an ulcerogenic sparing effect in rats. Jpn J Pharmacol. 2001 Feb;85(2):175-82.

Tel:781-999-4286      E_mail:info@targetmol.com      Address:36 Washington Street,Wellesley Hills,MA 02481