

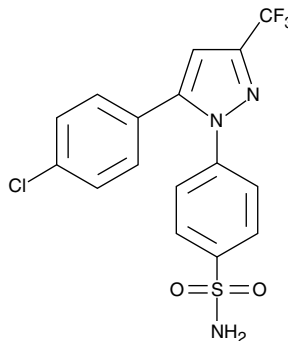
Product Information



SC-236

Item No. 10004219

CAS Registry No.: 170569-86-5
Formal Name: 4-[5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-benzenesulfonamide
MF: C₁₆H₁₁ClF₃N₃O₂S
FW: 401.8
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 254 nm



Laboratory Procedures

For long term storage, we suggest that SC-236 be stored as supplied at -20°C. It should be stable for at least two years.

SC-236 is supplied as a crystalline solid. A stock solution may be made by dissolving the SC-236 in the solvent of choice. SC-236 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of SC-236 in these solvents is approximately 30 mg/ml.

SC-236 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SC-236 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. SC-236 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

The physiologic roles and importance of constitutive COX-1 and inducible COX-2 have been reviewed.^{1,2} SC-236 is a potent, selective, orally active inhibitor of COX-2 with an IC₅₀ value of 10 nM and approximately 18,000-fold COX-2 selectivity.³ SC-236 has a long plasma half-life and can be dosed once daily (20 mg/kg) in rodents to achieve lasting inhibition of COX-2.⁴

References

1. Fitzpatrick, F.A. and Soberman, R. Regulated formation of eicosanoids. *J. Clin. Invest.* **107(11)**, 1339-1345 (2001).
2. Bertolini, A., Ottani, A., and Sandrini, M. Selective COX-2 inhibitors and dual acting anti-inflammatory drugs: Critical remarks. *Current Medicinal Chemistry* **9**, 1033-1043 (2002).
3. Penning, T.D., Talley, J.J., Bertenshaw, S.R., *et al.* Synthesis and biological evaluation of the 1,5-diarylpyrazole class of cyclooxygenase-2 inhibitors: Identification of 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl] benzenesulfonamide (SC-58635, celecoxib). *J. Med. Chem.* **40**, 1347-1365 (1997).
4. Loftin, C.D., Trivedi, D.B., and Langenbach, R. Cyclooxygenase-1-selective inhibition prolongs gestation in mice without adverse effects on the ductus arteriosus. *J. Clin. Invest.* **110(4)**, 549-557 (2002).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10004219

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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