

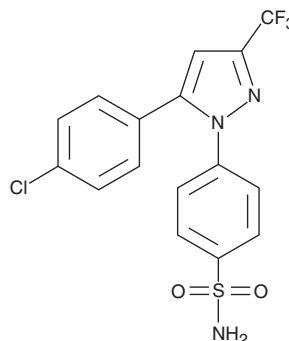
PRODUCT INFORMATION



SC-236

Item No. 10004219

CAS Registry No.: 170569-86-5
Formal Name: 4-[5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-benzenesulfonamide
Synonym: CID-9865808
MF: C₁₆H₁₁ClF₃N₃O₂S
FW: 401.8
Purity: ≥98%
UV/Vis.: λ_{max}: 254 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

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

Description

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 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. *Curr. Med. Chem.* **9**(10), 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**(9), 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).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM