

PRODUCT INFORMATION



SC-58125

Item No. 70655

CAS Registry No.: 162054-19-5

Formal Name: 5-(4-fluorophenyl)-1-[4-(methylsulfonyl)phenyl]-3-(trifluoromethyl)-1H-pyrazole

MF: C₁₇H₁₂N₂SO₂F₄

FW: 384.3

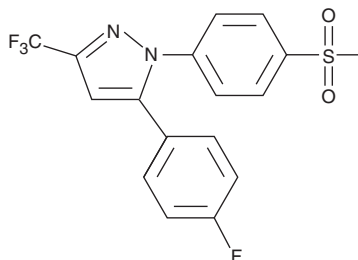
Purity: ≥98%

UV/Vis.: λ_{max}: 255 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-58125 is supplied as a crystalline solid. A stock solution may be made by dissolving the SC-58125 in the solvent of choice. SC-58125 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of SC-58125 in ethanol and DMSO is approximately 10 mg/ml and approximately 30 mg/ml in DMF.

SC-58125 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SC-58125 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SC-58125 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SC-58125 is a member of the diaryl heterocycle group of selective COX-2 inhibitors which includes MK 966 (rofecoxib), DUP-697, and celecoxib. SC-58125 is a potent and time-dependent inhibitor of COX-2.¹ When tested on the isolated recombinant enzymes, SC-58125 is at least 150 times more potent in the inhibition of COX-2 as COX-1.² In cultured HUVEC cells, SC-58125 inhibits COX-2 with an IC₅₀ value of 70 nM.³ It also inhibits the growth of the COX-2 expressing cell line HCA-7 in nude mice at 5-10 mg/kg when given intraperitoneally.⁴

References

1. Seibert, K., Zhang, Y., Leahy, K., *et al.* Pharmacological and biochemical demonstration of the role of cyclooxygenase 2 in inflammation and pain. *Proc. Natl. Acad. Sci. USA* **91**, 12013-12017 (1994).
2. Anderson, G.D., Hauser, S.D., McGarity, K.L., *et al.* Selective inhibition of cyclooxygenase (COX)-2 reverses inflammation and expression of COX-2 and interleukin 6 in rat adjuvant arthritis. *J. Clin. Invest.* **97**, 2672-2679 (1996).
3. Miralpeix, M., Camacho, M., López-Belmonte, J., *et al.* Selective induction of cyclo-oxygenase-2 activity in the permanent human endothelial cell line HUV-EC-C: Biochemical and pharmacological characterization. *Br. J. Pharmacol.* **121**, 171-180 (1997).
4. Sheng, H., Shao, J., Kirkland, S.C., *et al.* Inhibition of human colon cancer cell growth by selective inhibition of cyclooxygenase-2. *J. Clin. Invest.* **99**, 2254-2259 (1997).

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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