

Certificate of Analysis

Print Date: Jan 18th 2016

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Product Name: SC 58125 Catalog No.: 2895 Batch No.: 2

CAS Number: 162054-19-5

IUPAC Name: 5-(4-Fluorophenyl)-1-[4-(methylsulfonyl)phenyl]-3-(trifluoromethyl)-1*H*-pyrazole

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{12}F_4N_2O_2S$

Batch Molecular Weight: 384.35 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

ethanol to 25 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.8% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 53.12 3.15 7.29 Found 52.86 2.96 7.21



Product Information

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IUPAC Name: 5-(4-Fluorophenyl)-1-[4-(methylsulfonyl)phenyl]-3-(trifluoromethyl)-1*H*-pyrazole

Description:

Selective cyclooxygenase 2 (COX-2) inhibitor (IC $_{50}$ values are 0.04 and >100 μ M for COX-2 and COX-1 respectively). Anti-inflammatory; blocks edema and hyperalgesia in vivo following an inflammatory insult, without causing gastric mucosal damage. Also displays antitumor activity.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₇H₁₂F₄N₂O₂S

Batch Molecular Weight: 384.35 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM ethanol to 25 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Seibert *et al* (1994) Pharmacological and biochemical demonstration of the role of cyclooxygenase 2 in inflammation and pain. Proc.Natl.Acad.Sci.USA *91* 12013.

Gierse et al (1996) A single amino acid difference between cyclooxygenase-1 (COX-1) and -2 (COX-2) reverses the selectivity of COX-2 specific inhibitors. J.Biol.Chem. 271 15810. PMID: 8663121.

Williams et al (2001) A cyclooxygenase-2 inhibitor (SC-58125) blocks growth of established colon cancer xenografts. Neoplasia 3 428. PMID: 11687954.