



Certificate of Analysis

www.tocris.com

Product Name: DuP 697 Catalog No.: 1430 Batch No.: 1

CAS Number: 88149-94-4

IUPAC Name: 5-Bromo-2-(4-fluorophenyl)-3-[4-(methylsulfonyl)phenyl]-thiophene

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{12}BrFO_2S_2$

Batch Molecular Weight: 411.3

Physical Appearance: White solid

Solubility: DMSO to 100 mM Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.27$ (Ethyl acetate:Petroleum ether [1:3])

Melting Point: At 135°C

HPLC: Shows >99.3% purity

1H NMR: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 49.64 2.94 Found 49.48 2.89





Product Information

Print Date: Apr 28th 2015

www.tocris.com

Product Name: DuP 697 Catalog No.: 1430 Batch No.: 1

CAS Number: 88149-94-4

IUPAC Name: 5-Bromo-2-(4-fluorophenyl)-3-[4-(methylsulfonyl)phenyl]-thiophene

Description:

Potent and selective inhibitor of cyclooxygenase-2 (IC_{50} values are 10 and 800 nM for COX-2 and COX-1 respectively). Inhibits prostaglandin synthesis and is anti-inflammatory in vivo. Orally active

Physical and Chemical Properties:

Batch Molecular Formula: C₁₇H₁₂BrFO₂S₂

Batch Molecular Weight: 411.3 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 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:

Gans *et al* (1990) Anti-inflammatory and safety profile of DuP 697, a novel orally effective prostaglandin synthesis inhibitor. J.Pharmacol.Exp.Ther. **254** 180. PMID: 2366180.

Gierse et al (1995) Expression and selective inhibition of the constitutive and inducible forms of human cyclo-oxygenase. Biochem.J. 305 479, PMID: 7832763.

Rossoni et al (2002) Inhibition of cyclo-oxygenase-2 exacerbates ischaemia-induced acute myocardial dysfunction in the rabbit. Br.J.Pharmacol. 135 1540. PMID: 11906968.

