

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: FK 3311 Catalog No.: 2776 Batch No.: 1

CAS Number: 116686-15-8

IUPAC Name: N-[4-Acetyl-2-(2,4-difluorophenoxy)phenyl]methanesulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{13}F_2NO_4S$

Batch Molecular Weight: 341.33 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

ethanol to 50 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.2$ (Diethyl ether:Petroleum ether [1:1])

HPLC: Shows >99.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 52.78 3.84 4.1 Found 52.39 3.62 3.6



Product Information

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Description:

Cyclooxygenase-2 (COX-2) inhibitor. Inhibits zymosan-induced prostaglandin E₂ production by rat peritoneal neutrophils in vitro and adjuvant-induced arthritis in vivo. Anti-inflammatory.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{15}H_{13}F_2NO_4S$

Batch Molecular Weight: 341.33 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM ethanol to 50 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:

Tsuji et al (1992) Studies on antiinflammatory agents. I. Synthesis and pharmacological properties of 2'-phenoxy-methanesulfonanilide derivatives. Chem.Pharm.Bull. **40** 2399. PMID: 1446362.

Nakamura *et al* (1993) Studies on antiinflammatory agents. III. Synthesis and pharmacological properties of metabolites of 4'-acetyl-2'-(2,4-difluorophenoxy)methanesulfonanilide (FK3311). Chem.Pharm.Bull. *41* (2050).

Otani et al (2007) Effects of the COX-2 inhibitor FK3311 on ischemia-reperfusion injury in the rat lung. J.Invest.Surg. 20 175. PMID: 17613692.