

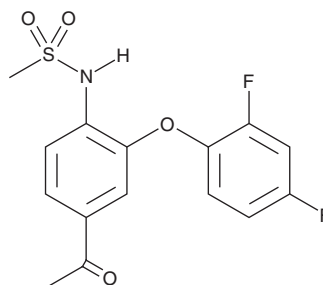
# PRODUCT INFORMATION



## FK-3311

Item No. 17697

**CAS Registry No.:** 116686-15-8  
**Formal Name:** N-[4-acetyl-2-(2,4-difluorophenoxy)phenyl]-methanesulfonamide  
**Synonyms:** COX-2 Inhibitor V  
**MF:** C<sub>15</sub>H<sub>13</sub>F<sub>2</sub>NO<sub>4</sub>S  
**FW:** 341.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 225, 272 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

FK-3311 is supplied as a crystalline solid. A stock solution may be made by dissolving the FK-3311 in the solvent of choice. FK-3311 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of FK-3311 in these solvents is approximately 5 mg/ml in ethanol and 30 mg/ml in DMSO and dimethyl formamide.

### Description

FK3311 is a cell permeable and orally available sulfonanilide that acts as a COX-2 inhibitor and non-steroidal anti-inflammatory drug (NSAID).<sup>1,2</sup> FK3311 inhibits LPS-induced thromboxane B<sub>2</sub> (TxB<sub>2</sub>; Item No. 19030) production (IC<sub>50</sub> = 316 nM) *in vitro* and inhibits adjuvant-induced arthritis (ED<sub>50</sub> = 0.29 mg/kg) in rats without causing gastrointestinal irritation. FK3311 also alleviates ischemia-reperfusion injury in canine liver and rat lung *in vivo*.<sup>3,4</sup>

### References

1. Tsuji, K., Nakamura, K., Konishi, N., *et al.* Synthesis and pharmacological properties of 2'-phenoxy-methanesulfonanilide derivatives. *Chem. Pharm. Bull. (Tokyo)* **40(9)**, 2399-2409 (1992).
2. Grossman, C.J., Wiseman, J., Lucas, S.F., *et al.* Inhibition of constitutive and inducible cyclooxygenase activity in human platelets and mononuclear cells by NSAIDs and Cox 2 inhibitors. *Inflamm. Res.* **44(6)**, 253-257 (1995).
3. Sunose, Y., Takeyoshi, I., Ohwada, S., *et al.* The effect of cyclooxygenase-2 inhibitor FK3311 on ischemia-reperfusion injury in a canine total hepatic vascular exclusion model. *J. Am. Coll. Surg.* **192(1)**, 54-62 (2001).
4. Otani, Y., Takeyoshi, I., Yoshinari, D., *et al.* Effects of the COX-2 inhibitor FK3311 on ischemia-reperfusion injury in the rat lung. *J. Invest. Surg.* **20(3)**, 175-180 (2007).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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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