

**Catalog # 10-2440**

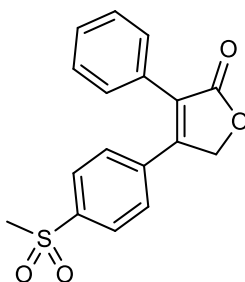
**Rofecoxib**

162011-90-7

4-[4-(methylsulfonyl)phenyl]-3-phenyl-2(5H)-furanone

MK-966

Lot # X106611



Potent and selective COX-2 inhibitor with 1000-fold selectivity over COX-1,  $IC_{50}=26$  nm vs  $>50$   $\mu M^1$ . Potent nonsteroidal anti-inflammatory agent<sup>1</sup>. Clinically useful NSAID which was withdrawn from use due to cardiovascular side effects<sup>3</sup>.

- 1) Chan *et al.* (1999), *Rofecoxib [Vioxx, MK-0966; 4-(4'-methylsulfonylphenyl)-3-phenyl-2-(5H)-furanone]: a potent and orally active cyclooxygenase-2 inhibitor. Pharmacological and biochemical profiles*; J. Pharmacol. Exp. Ther., **290** 551
- 2) Catalla-Lawson *et al.* (2013), *Effects of specific inhibition of cyclooxygenase-2 on sodium balance, hemodynamics and vasoactive eicosanoids*; J. Pharmacol. Exp. Ther., **289** 735

**PHYSICAL DATA**

Molecular Weight:	314.36
Molecular Formula:	C <sub>17</sub> H <sub>14</sub> O <sub>4</sub> S
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**