

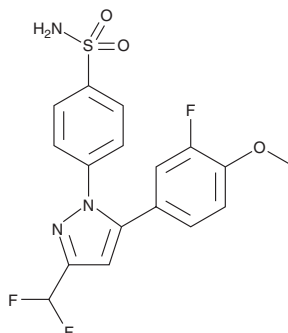
PRODUCT INFORMATION



Deracoxib

Item No. 27371

CAS Registry No.: 169590-41-4
Formal Name: 4-[3-(difluoromethyl)-5-(3-fluoro-4-methoxyphenyl)-1H-pyrazol-1-yl]-benzenesulfonamide
Synonym: SC-59046
MF: C₁₇H₁₄F₃N₃O₃S
FW: 397.4
Purity: ≥98%
UV/Vis.: λ_{max}: 256 nm
Supplied as: A 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

Deracoxib is supplied as a solid. A stock solution may be made by dissolving the deracoxib in the solvent of choice, which should be purged with an inert gas. Deracoxib is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of deracoxib in ethanol is approximately 3 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Deracoxib is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, deracoxib should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Deracoxib has a solubility of approximately 0.1 mg/ml in a 1:8 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Deracoxib is a non-steroidal anti-inflammatory drug (NSAID) and selective inhibitor of COX-2 (IC₅₀s = 0.63 and 23 μM for COX-2 and COX-1, respectively).¹ *In vivo*, deracoxib (0.3-10 mg/kg) increases weight bearing and decreases lameness and joint effusion in a canine model of urate crystal-induced intraarticular synovitis.² Deracoxib induces less lesion formation in the gastric mucosa of healthy canines than aspirin (Item No. 70260) when administered at a dose of 1.5 mg/kg.³ Formulations containing deracoxib have been used in the treatment of pain associated with canine osteoarthritis.

References

1. Li, J., DeMello, K.M.L., Cheng, H., *et al.* Discovery of a potent, selective and orally active canine COX-2 inhibitor, 2-(3-difluoromethyl-5-phenyl-pyrazol-1-yl)-5-methanesulfonyl-pyridine. *Bioorg. Med. Chem. Lett.* **14**(1), 95-98 (2004).
2. Millis, D.L., Weigel, J.P., Moyers, T., *et al.* Effect of deracoxib, a new COX-2 inhibitor, on the prevention of lameness induced by chemical synovitis in dogs. *Vet. Ther.* **3**(4), 453-464 (2002).
3. Sennello, K.A. and Leib, M.S. Effects of deracoxib or buffered aspirin on the gastric mucosa of healthy dogs. *J. Vet. Intern. Med.* **20**(6), 1291-1296 (2006).

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.

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