# **PRODUCT** INFORMATION



## Cimicoxib

Item No. 10006295

CAS Registry No.:	265114-23-6	Han /
Formal Name:	4-[4-chloro-5-(3-fluoro-4-methoxyphenyl)-	s=o
	1H-imidazol-1-yl]-benzenesulfonamide	$\downarrow$
Synonym:	UR-8880	F
MF:	C <sub>16</sub> H <sub>13</sub> CIFN <sub>3</sub> O <sub>3</sub> S	
FW:	381.8	
Purity:	≥98%	N I
Supplied as:	A solid	
Storage:	-20°C	N—————————————————————————————————————
Stability:	≥4 years	ĊI
Information corresponds the product specifications. Patch specific analytical results are provided on each certificate of analysis		

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### Laboratory Procedures

Cimicoxib is supplied as a solid. A stock solution may be made by dissolving the cimicoxib in the solvent of choice, which should be purged with an inert gas. Cimicoxib is soluble in the organic solvent DMSO.

### Description

Cimicoxib is a non-steroidal anti-inflammatory drug (NSAID) that inhibits COX-2 selectively over COX-1 (IC<sub>50</sub>s = 0.005 and 3.3  $\mu$ M, respectively).<sup>1,2</sup> It inhibits paw swelling by 93% in a rat model of adjuvant-induced arthritis when administered at a dose of 1 mg/kg.<sup>2</sup> Cimicoxib (3 mg/kg, p.o.) inhibits carrageenan-induced decreases in paw withdrawal latency in the hot plate test in a rat model of hyperalgesia. Formulations containing cimicoxib have been used in the treatment of pain and inflammation associated with osteoarthritis or surgery in dogs.

### References

- 1. Kim, T.W., Lebkowska-Wieruszewska, B., Owen, H., et al. Pharmacokinetic profiles of the novel COX-2 selective inhibitor cimicoxib in dogs. Vet. J. 200(1), 77-81 (2014).
- 2. Almansa, C., Alfón, J., de Arriba, A.F., et al. Synthesis and structure-activity relationship of a new series of COX-2 selective inhibitors: 1,5-diarylimidazoles. J. Med. Chem. 46(16), 3463-3475 (2003).

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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