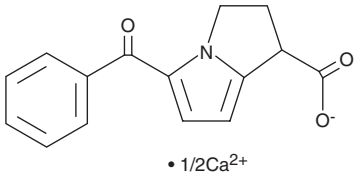
PRODUCT INFORMATION

Ketorolac (calcium salt)

Item No. 9003475

CAS Registry No.:	167105-81-9
Formal Name:	5-benzoyl-2,3-dihydro-1H-pyrrolizine-1-carboxylic acid, hemicalcium salt
MF:	$C_{15}H_{12}NO_3$ • 1/2Ca
FW:	274.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 246, 315 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ketorolac (calcium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the ketorolac (calcium salt) in the solvent of choice, which should be purged with an inert gas. Ketorolac (calcium salt) is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Ketorolac (calcium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ketorolac (calcium salt) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ketorolac (calcium salt) has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ketorolac is a non-steroidal anti-inflammatory drug (NSAID) and a non-selective COX inhibitor (IC_{50} = 20 nM for both COX-1 and COX-2).[1] It prevents increases in paw swelling, increases paw withdrawal latency in a hot-plate test, and decreases prostaglandin E_2 (PGE_2) levels in paw tissue in a mouse model of carrageenan-induced inflammation when administered at a dose of 30 mg/kg. Ketorolac is a racemic mixture containing the active (S)-ketorolac (Item No. 11348) and inactive (R)-ketorolac enantiomers. Formulations containing ketorolac have been used to manage postoperative pain and as ophthalmic solutions to treat ocular pain and inflammation.

Reference

1. Zhang, Y., Shaffer, A., Portanova, J., *et al.* Inhibition of cyclooxygenase-2 rapidly reverses inflammatory hyperalgesia and prostaglandin E_2 production. *J. Pharmacol. Exp. Ther.* **283(3)**, 1069-1075 (1997).

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