



Product Information

Product ID K1978

CAS No. 74103-07-4

Chemical Name

Synonym

Formula $C_{15}H_{13}NO_3 \cdot C_4H_{11}NO_3$

Formula Wt. 376.40

Melting Point 165-167°C

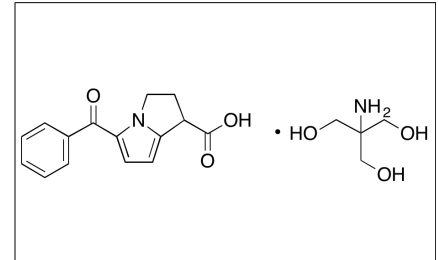
Purity $\geq 98\%$

Solubility

Store Temp Ambient

Ship Temp Ambient

Description Ketorolac is a non-steroidal anti-inflammatory drug (NSAID) that exhibits anti-inflammatory and analgesic activities. Ketorolac inhibits COX-1 and COX-2. In vivo, administration of ketorolac prevents the spinal injury-induced increase of protease-activated receptor 1 (PAR1) levels and decreases activation of spinal astrocytes, resulting in decreased allodynia. In spinal neurons, ketorolac decreases substance P-, calcitonin gene-related peptide- and dynorphin-immunoreactivity. Additionally, this compound decreases expression of phosphodiesterase type 4 (PDE4D).



Bulk quantities available upon request

Product ID	Size
K1978	1 g
K1978	5 g
K1978	25 g

References Dong L, Smith JR, Winkelstein BA. Ketorolac reduces spinal astrocytic activation and PAR1 expression associated with attenuation of pain after facet joint injury. *J Neurotrauma*. 2013 May 15;30(10):818-25. PMID: 23126437.

Bendixen KH, Baad-Hansen L, Cairns BE, et al. Effects of low-dose intramuscular ketorolac on experimental pain in the masseter muscle of healthy women. *J Orofac Pain*. 2010 Fall;24(4):398-407. PMID: 21197512.

Wang XM, Hamza M, Gordon SM, et al. COX inhibitors downregulate PDE4D expression in a clinical model of inflammatory pain. *Clin Pharmacol Ther*. 2008 Jul;84(1):39-42. PMID: 18288087.

Ma W, Eisenach JC. Intraplantar injection of a cyclooxygenase inhibitor ketorolac reduces immunoreactivities of substance P, calcitonin gene-related peptide, and dynorphin in the dorsal horn of rats with nerve injury or inflammation. *Neuroscience*. 2003;121(3):681-90. PMID: 14568028.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.