



LKT Laboratories, Inc.

Ibutilast

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Product Information

Product ID I0480

CAS No. 50847-11-5

Chemical Name

Synonym 3-Isobutyryl-2-isopropylpyrazolo[1,5-a]pyridine, 2-Methyl-1-[2-(1-methylethyl)pyrazolo[1,5-a]pyridin-3-yl]-1-propanone, 2-Isopropyl-3-isobutyrylpyrazolo[1,5-a]pyridine, KC-404, AV-411

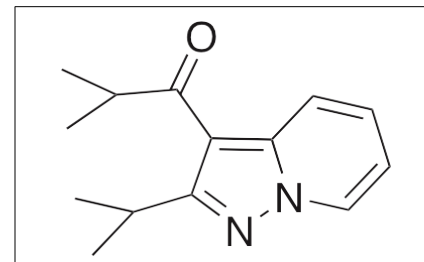
Formula C₁₄H₁₈N₂O

Formula Wt. 230.31

Melting Point 53-54 °C

Purity ≥98%

Solubility



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
I0480	10 mg	\$183.10
I0480	25 mg	\$422.50
I0480	100 mg	\$1408.60

Store Temp Ambient

Ship Temp Ambient

Description Ibutilast is an inhibitor of phosphodiesterases 3 and 5 (PDE3/5) that also inhibits the leukotriene D₄ (LTD₄) receptor in airway smooth muscle cells. Ibutilast exhibits vasodilatory, anti-inflammatory, anti-asthma, anti-platelet, analgesic, and antinociceptive activities. In clinical settings, ibutilast increases cerebral blood flow in several brain regions after ischemic stroke. Ibutilast also non-competitively inhibits the functions of pro-inflammatory macrophage migration inhibitory factor (MIF), preventing glial cell activation. In other cellular models, ibutilast decreases activation of NF-κB, inhibiting HIV-1 Tat-induced production of TNF-α.

References Inoue N, Fukuda S, Inada T, et al. Effect of ibutilast on the reciprocal inhibitory visual-vestibular interaction closely related to dizziness after cerebral ischemia. *J Stroke Cerebrovasc Dis.* 2014 Jan;23(1):51-5. PMID: 23085301.

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Cho Y, Crichlow GV, Vermeire JJ, et al. Allosteric inhibition of macrophage migration inhibitory factor revealed by ibutilast. *Proc Natl Acad Sci U S A.* 2010 Jun 22;107(25):11313-8. PMID: 20534506.

Ledeboer A, Hutchinson MR, Watkins LR, et al. Ibutilast (AV-411). A new class therapeutic candidate for neuropathic pain and opioid withdrawal syndromes. *Expert Opin Investig Drugs.* 2007 Jul;16(7):935-50. PMID: 17594181.

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Ohashi M, Kanai R, Nishino K, et al. Antagonistic effect of KC-404, a new anti-asthmatic agent, on leukotriene D₄-induced contractile responses in isolated guinea pig smooth muscles. *Prostaglandins.* 1986 Dec;32(6):875-88. PMID: 3562868.

Ohashi M, Ohkubo H, Kito J, et al. A new vasodilator 3-isobutyryl-2-isopropylpyrazolo[1,5-a]pyridine (KC-404) has a

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