



LKT Laboratories, Inc.

Istradefylline

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID I7478

CAS No. 155270-99-8

Chemical Name (E)-8-(3,4-Dimethoxystyryl)-1,3-diethyl-7-methylxanthine

Synonym 8-[(1E)-2-(3,4-Dimethoxyphenyl)ethenyl]-1,3-diethyl-3,7-dihydro-7-methyl-1H-purine-2,6-dione, KW-6002

Formula C₂₀H₂₄N₄O₄

Formula Wt. 384.43

Melting Point

Purity ≥98%

Solubility DMSO 6 mg/mL (15.6 mM)

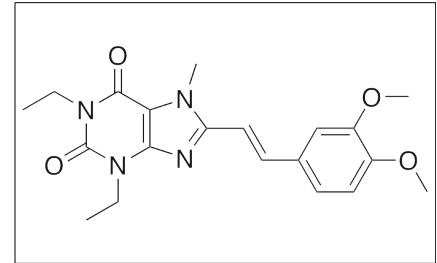
Water Insoluble

Ethanol Insoluble

Store Temp Ambient

Ship Temp Ambient

Description Istradefylline is a competitive inhibitor of adenosine A2A receptors that exhibits tremorolytic activity. Istradefylline is currently under examination as a potential treatment for Parkinson's disease, as it decreases "off" time in subjects with Parkinson's disease without worsening dyskinesia. Istradefylline increases dopamine levels in normal and 6-OHDA-lesioned animal models, improving cognitive performance. In other animal models, istradefylline decreases GABA release and elicits conditioned place preference (CPP) and increases locomotor activity, indicating a potential role for adenosine receptors in reward and reinforcement.



Bulk quantities available upon request

Product ID	Size
I7478	5 mg
I7478	25 mg
I7478	100 mg

References Kadowaki Horita T, Kobayashi M, Mori A, et al. Effects of the adenosine A2A antagonist istradefylline on cognitive performance in rats with a 6-OHDA lesion in prefrontal cortex. *Psychopharmacology (Berl)*. 2013 Dec;230(3):345-52. PMID: 23748382.

Saki M, Yamada K, Koshimura E, et al. In vitro pharmacological profile of the A2A receptor antagonist istradefylline. *Naunyn Schmiedeberg Arch Pharmacol*. 2013 Nov;386(11):963-72. PMID: 23812646.

Mizuno Y, Hasegawa K, Kondo T, et al. Clinical efficacy of istradefylline (KW-6002) in Parkinson's disease: a randomized, controlled study. *Mov Disord*. 2010 Jul 30;25(10):1437-43. PMID: 20629136.

Salamone JD, Betz AJ, Ishiwari K, et al. Tremorolytic effects of adenosine A2A antagonists: implications for parkinsonism. *Front Biosci*. 2008 May 1;13:3594-605. PMID: 18508458.

Harper LK, Beckett SR, Marsden CA, et al. Effects of the A2A adenosine receptor antagonist KW6002 in the nucleus accumbens in vitro and in vivo. *Pharmacol Biochem Behav*. 2006 Jan;83(1):114-21. PMID: 16451807.

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