

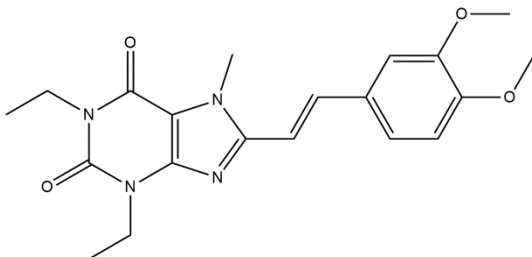
# Istradefylline

04/20

**ALTERNATE NAMES:** KW-6002; 8-[(E)-2-(3,4-dimethoxyphenyl)ethenyl]-1,3-diethyl-7-methylpurine-2,6-dione; (E)-8-(3,4-Dimethoxystyryl)-1,3-diethyl-7-methyl-1H-purine-2,6(3H,7H)-dione; (E)-8-(3,4-Dimethoxystyryl)-1,3-diethyl-7-methylxanthine; 8-[2-(3,4-Dimethoxy-phenyl)-vinyl]-1,3-diethyl-7-methyl-3,7-dihydro-purine-2,6-dione; 8-[(1E)-2-(3,4-dimethoxyphenyl)ethenyl]-1,3-diethyl-3,7-dihydro-7-methyl-1H-purine-2,6-dione

**CATALOG #:** B3013-5 5 mg  
B3013-25 25 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>20</sub>H<sub>24</sub>N<sub>4</sub>O<sub>4</sub>

**MOLECULAR WEIGHT:** 384.4

**CAS NUMBER:** 155270-99-8

**APPEARANCE:** White to off-white solid powder

**PURITY:** >95%

**SOLUBILITY:** ~8 mg/ml in DMSO

**DESCRIPTION:** Istradefylline is an adenosine receptor 2A (A2A) antagonist with a K<sub>i</sub> value of 2.2 nM in a radioligand binding assay. Oral administration of Istradefylline reverses motor disability without inducing dyskinesias or hyperactivity in an MPTP-induced marmoset model of Parkinson's disease. It also decreases bradykinesia induced by L-DOPA and improves attentional and working memory deficits in an MPTP-induced macaque model of Parkinson's disease.

**STORAGE TEMPERATURE:** -20°C. Store in the dark. Product is light sensitive. Protect from air. Store under desiccating conditions.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**REFERENCES:**

1. Kanda, T., Jackson, M.J., Smith, L.A., et al. Adenosine A2A antagonist: A novel antiparkinsonian agent that does not provoke dyskinesia in parkinsonian monkeys. *Ann Neurol.* 43(4), 507-513 (1998).
2. Shimada, J., Nobuaki, K., Nonaka, H., et al. Adenosine A2A antagonists with potent anti-cataleptic activity. *Bioorg. Med. Chem. Lett.* 7(18), 2349-2352 (1997).
3. Ko, W.K.D., Camus, S.M., Li, Q., et al. An evaluation of istradefylline treatment on Parkinsonian motor and cognitive deficits in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP)-treated macaque models. *Neuropharmacology* 100(Pt. A), 48-58 (2016).

**RELATED PRODUCTS:**

AZD-4635 (Cat. No. B2012)  
 SCH-58261 (Cat. No. B1638)  
 CPI-444 (Cat. No. B1970)  
 Namodenoson (Cat. No. B2506)  
 NECA (Cat. No. B2262)

**DISCLAIMER:** *FOR RESEARCH USE ONLY! Not to be used on humans.*