Product Name: Istradefylline  
Catalog No.: 5147  
Batch No.: 4  

CAS Number: 155270-99-8  
IUPAC Name: 8-[(1E)-2-(2-(3,4-Dimethoxyphenyl)ethenyl]-1,3-diethyl-3,7-dihydro-7-methyl-1H-purine-2,6-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $\text{C}_{20}\text{H}_{24}\text{N}_{4}\text{O}_{4}$

Batch Molecular Weight: 384.43

Physical Appearance: Light yellow solid

Solubility: DMSO to 20 mM

Storage: Store at +4°C

Batch Molecular Structure:

![Molecular Structure]

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

$^1$H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th>C</th>
<th>H</th>
<th>N</th>
<th></th>
</tr>
</thead>
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<tr>
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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Name:** Istradefylline  
**Catalog No.:** 5147  
**Batch No.:** 4

### Description:
Potent and selective adenosine $A_{2A}$ receptor antagonist ($K_i$ values are 2.2 and 150 nM for $A_{2A}$ and $A_1$ receptors respectively). Anticataleptic and antiparkinson agent; reverses drug-induced motor dysfunction in animal models.

### Physical and Chemical Properties:
- **Batch Molecular Formula:** C$_{20}$H$_{24}$N$_4$O$_4$
- **Batch Molecular Weight:** 384.43
- **Physical Appearance:** Light yellow solid

### Minimum Purity:
≥99%

### Batch Molecular Structure:
![Molecular Structure](image)

### Storage:
Store at +4°C  
CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

### Solubility & Usage Info:
DMSO to 20 mM

### Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

- **SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
- **SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

### References:
- Shiozaki *et al* 1999) Actions of adenosine $A_{2A}$ receptor antagonist KW-6002 on drug-induced catalepsy and hypokinesia caused by rese. or MPTP. Psychopharmacology 147 90. PMID: 10591873.