Certificate of Analysis

Product Name: **MRS 1334** **Catalog No.: 1385** **Batch No.: 2**

CAS Number: 192053-05-7

IUPAC Name: 1,4-Dihydro-2-methyl-6-phenyl-4-(phenylethynyl)-3,5-pyridinedicarboxylic acid 3-ethyl-5-[(3-nitrophenyl)methyl] ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{31}H_{26}N_2O_6$

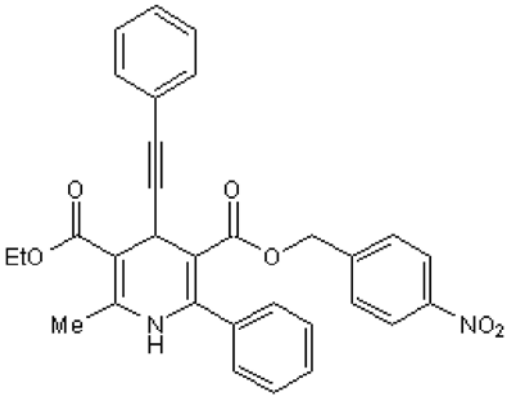
Batch Molecular Weight: 522.56

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM

Storage: Desiccate at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.48 (Isohexane:Ethyl acetate [3:2])

Melting Point: Between 159 - 161°C

HPLC: Shows >98.2% purity

^{1}H NMR: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	71.25	5.01	5.36
Found	71.5	5.06	5.33

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **MRS 1334** **Catalog No.: 1385** **Batch No.: 2**

CAS Number: 192053-05-7

IUPAC Name: 1,4-Dihydro-2-methyl-6-phenyl-4-(phenylethynyl)-3,5-pyridinedicarboxylic acid 3-ethyl-5-[(3-nitrophenyl)methyl] ester

Description:

Potent and highly selective antagonist for the human adenosine A_3 receptor. K_i values are 2.69 nM at hA_3, and > 100 µM at rat A_1 and rat A_{2A} receptors.

Physical and Chemical Properties:

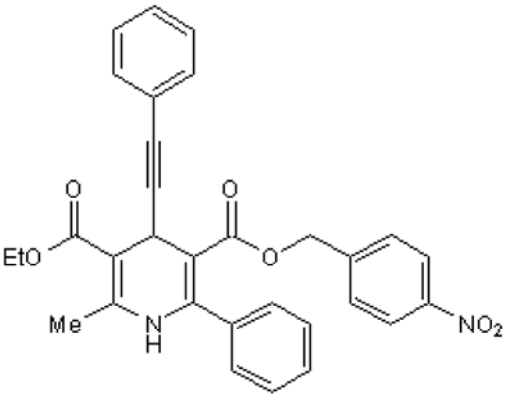
Batch Molecular Formula: $C_{31}H_{26}N_2O_6$

Batch Molecular Weight: 522.56

Physical Appearance: Pale yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at -20°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 100 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.

Licensing Information:

Sold with the permission of the NIH, US Patent 60/029,855

References:

Corriden *et al* (2013) Adenosine-A_3 receptors in neutrophil microdomains promote the formation of bacteria-tethering cytonemes. EMBO.Rep. ***14*** 726. PMID: 23817552.

Baraldi and Borea (2000) New potent and selective human adenosine A_3 receptor antagonists. TiPS ***21*** 456. PMID: 11121831.

Li *et al* (1998) Structure-activity relationships and molecular modeling of 3,5-diacyl-2,4-dialkylpyridine derivatives as selective A_3 adenosine receptor antagonists. J.Med.Chem. ***41*** 3186. PMID: 9703464.

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956