

Product Name: MRS 1754

Catalog No.: 2752

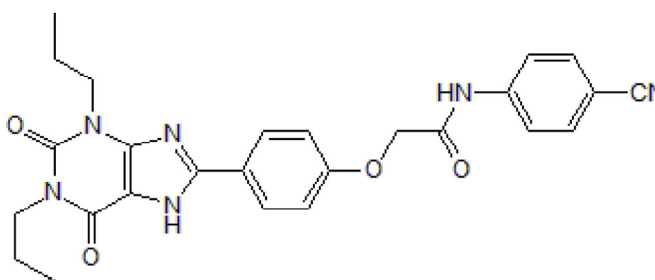
Batch No.: 6

CAS Number: 264622-58-4

IUPAC Name: *N*-(4-Cyanophenyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1*H*-purin-8-yl)phenoxy]-acetamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₆H₂₆N₆O₄
Batch Molecular Weight: 486.52
Physical Appearance: Off White solid
Solubility: DMSO to 5 mM with gentle warming
Storage: Desiccate at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.4% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	64.19	5.39	17.27
Found	63.93	5.4	17.2

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

MRS 1754 is a selective adenosine A_{2B} receptor antagonist (K_i values are 1.97, 16.8, 403, 503, 570 and 612 nM for hA_{2B}, rA₁, hA₁, hA_{2A}, hA₃ and rA_{2A} receptors respectively).

Physical and Chemical Properties:

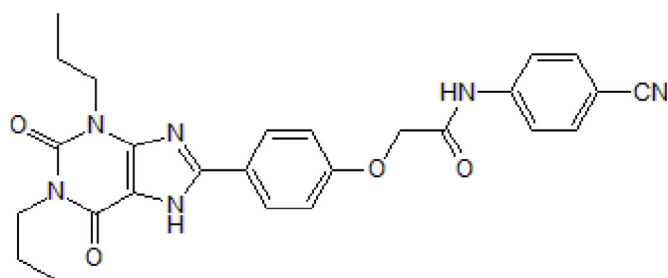
Batch Molecular Formula: C₂₆H₂₆N₆O₄

Batch Molecular Weight: 486.52

Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

DMSO to 5 mM with gentle warming

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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 University of Virginia Patent Foundation

References:

Nemeth *et al* (2007) Adenosine receptor activation ameliorates type I diabetes. *FASEB J.* **21** 2380.

Ji *et al* (2001) [³H]MRS 1754, a selective antagonist radioligand for A_{2B} adenosine receptors. *Biochem.Pharmacol.* **61** 657. PMID: 11266650.

Kim *et al* (2000) Anilide derivatives of an 8-phenylxanthine carboxylic congener are highly potent and selective antagonists at human A_{2B} adenosine receptors. *J.Med.Chem.* **43** 1165. PMID: 10737749.

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