Certificate of Analysis

Product Name: **Dansyl-NECA** **Catalog No.: 5122** **Batch No.: 1**

CAS Number: 219982-12-4

IUPAC Name: 1-Deoxy-1-[6-[[6-[[[5-dimethylamino)-1-naphthalenyl]sulfonyl]amino]hexyl]amino]-9*H*-purin-9-yl] -*N*-ethyl-β-D-ribofuranuronamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{30}H_{40}N_8O_6S$

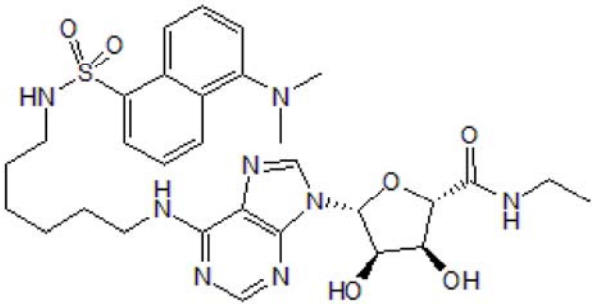
Batch Molecular Weight: 640.75

Physical Appearance: White solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.4 (Dichloromethane:Methanol:Ammonia soln. [90:9:1])

HPLC: Shows 99.8% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	56.23	6.29	17.49
Found	56.09	6.34	17.21

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: **Dansyl-NECA** **Catalog No.: 5122** **Batch No.: 1**

CAS Number: 219982-12-4

IUPAC Name: 1-Deoxy-1-[6-[[6-[[[5-dimethylamino)-1-naphthalenyl]sulfonyl]amino]hexyl]amino]-9*H*-purin-9-yl] -*N*-ethyl-β-D-ribofuranuronamide

Description:

High affinity and selective fluorescent adenosine A_1 receptor agonist (K_i values are 27, 3600 and 4300 nM for A_1, A_3 and A_2 receptors, respectively). Permits visualization of A_1 receptors in the rat cerebellar cortex.

Physical and Chemical Properties:

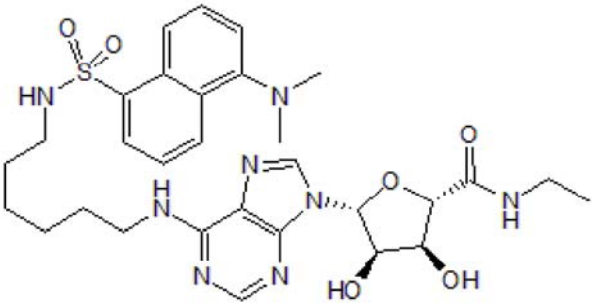
Batch Molecular Formula: $C_{30}H_{40}N_8O_6S$

Batch Molecular Weight: 640.75

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store 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

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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:

Kozma *et al* (2013) Fluorescent ligands for adenosine receptors. Bioorg. Med. Chem. Lett. ***23*** 26. PMID: 23200243.

Macchia *et al* (1998) Fluorescent probes for adenosine receptors: synthesis and biology of N^6-dansylaminoalkyl-substituted NECA derivatives. Bioorg. Med. Chem. Lett. ***8*** 3223. PMID: 9873707.