

Product Name: PE 154

Catalog No.: 4086

Batch No.: 1

CAS Number: 1192750-33-6

IUPAC Name: 4-[[[7-(Diethylamino)-2,4-dioxo-2H-1-benzopyran-3(4H)-ylidene]methyl]amino]-benzeneacetic acid 2-(1,2,3,4-tetrahydro-9-acridinyl)hydrazide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₅H₃₅N₅O₄·2½H₂O

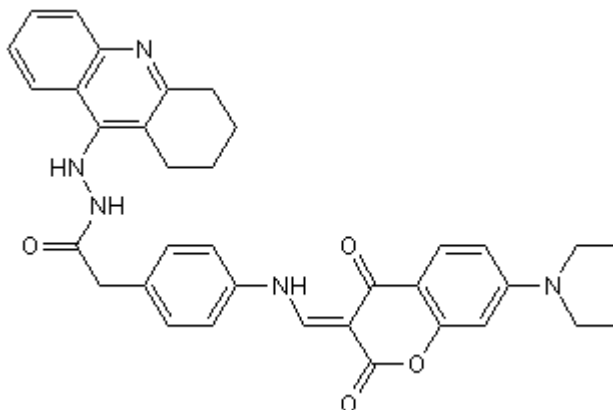
Batch Molecular Weight: 634.72

Physical Appearance: Yellow solid

Solubility: DMSO to 50 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.51 (Chloroform:Methanol [9:1])

HPLC: Shows 97.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	66.23	6.35	11.03
Found	65.96	5.93	10.97

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Description:

Potent fluorescent inhibitor of human acetylcholinesterase (AChE) and butyrylcholinesterase (BChE) (IC₅₀ values are 280 pM and 16 nM respectively). Targets and labels β-amyloid plaques in histochemical analysis.

Physical and Chemical Properties:

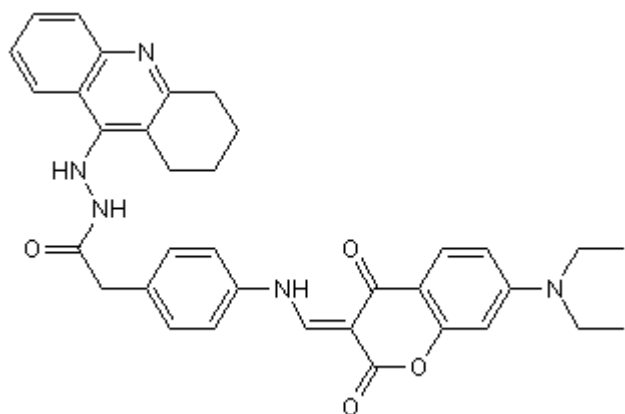
Batch Molecular Formula: C₃₅H₃₅N₅O₄·2½H₂O

Batch Molecular Weight: 634.72

Physical Appearance: Yellow solid

Minimum Purity: >97%

Batch Molecular Structure:



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 50 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:

Elsinghorst et al (2009) A gorge-spanning, high-affinity cholinesterase inhibitor to explore β-amyloid plaques. *Org.Biomol.Chem.* 7 3940. PMID: 19763296.

Kacza et al (2010) In vivo labelling of hippocampal beta-amyloid in triple-transgenic mice with a fluorescent acetylcholinesterase inhibitor released from nanoparticles. *Eur.J.Neurosci.* 31 99. PMID: 20092557.

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