

Product Name: GSHtracer

Catalog No.: 6594

Batch No.: 1

CAS Number: 1479071-34-5

IUPAC Name: 2-Cyano-*N,N*-dimethyl-3-(2,3,6,7-tetrahydro-11-oxo-1*H*,5*H*,11*H*-[1]benzopyrano[6,7,8-*ij*]quinolizin-10-yl)-2-propenamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₁N₃O₃·1/4H₂O

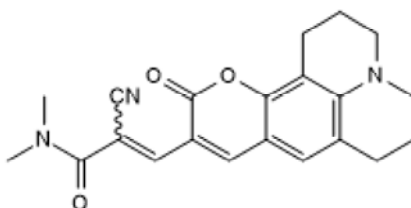
Batch Molecular Weight: 367.91

Physical Appearance: Purple solid

Solubility: DMSO to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.17 (Ethyl acetate:Petroleum ether [1:1])

HPLC: Shows 98.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	68.56	5.89	11.42
Found	68.67	5.84	11.41

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

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Description:

GSHtracer is a ratiometric fluorescent probe for measuring of glutathione (GSH) levels. Upon GSH binding, excitation/emission maximum λ shifts from 520/580 nm to 430/510 nm. F_{510}/F_{580} ratio correlates with GSH concentration.

Physical and Chemical Properties:

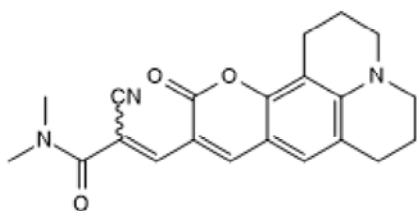
Batch Molecular Formula: $C_{21}H_{21}N_3O_3 \cdot \frac{1}{4}H_2O$

Batch Molecular Weight: 367.91

Physical Appearance: Purple solid

Minimum Purity: $\geq 98\%$

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 20 mM

This product is a mixture of *E/Z* geometric isomers. The quoted purity is for the sum of both isomers.

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:

Jeong *et al* (2018) Real-time monitoring of glutathione in living cells reveals that high glutathione levels are required to maintain stem cell function. *Stem Cell Reports* **10** 600. PMID: 29307581.

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