bio-techne
TOCRIS

Print Date: Jun 17th 2024

Certificate of Analysis

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Product Name: **4-Ethynyl-*N*-ethyl-1,8-naphthalimide** **Catalog No.: 5712** **Batch No.: 1**

CAS Number: 912921-26-7

IUPAC Name: 2-Ethyl-6-ethynyl-1*H*-benz[*de*]isoquinoline

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{16}H_{11}NO_2$

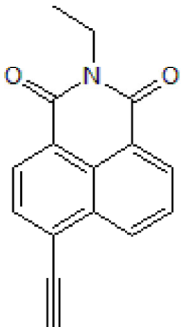
Batch Molecular Weight: 249.26

Physical Appearance: Yellow solid

Solubility: DMSO to 10 mM with gentle warming

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.41 (Ethyl acetate:Petroleum ether [9:1])

HPLC: Shows 99% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	77.1	4.45	5.62
Found	76.87	4.46	5.61

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

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Description:

Key information: 4-Ethynyl-N-ethyl-1,8-naphthalimide is a click-activated fluorescent probe, for cell surface imaging. Used for: imaging of cell surface and intracellular fucosylated glycoproteins and glycolipids. Application: suitable for flow cytometry and fluorescence microscopy. Properties and Photophysical Data: 4-Ethynyl-N-ethyl-1,8-naphthalimide is supplied with an azide reactive handle for copper-free click chemistry reactions.

Physical and Chemical Properties:

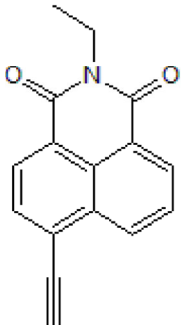
Batch Molecular Formula: $C_{16}H_{11}NO_2$

Batch Molecular Weight: 249.26

Physical Appearance: Yellow solid

Minimum Purity: ≥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 10 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.

References:

Yuan *et al* (2014) Chemical labeling of 5-iodo-2'-deoxyuridine with 4-ethynyl-*N*-ethyl-1,8-naphthalimide using copper-free Sonogashira cross-coupling in aqueous medium. Synth.Commun. ***44*** 1007.

Sawa *et al* (2006) Glycoproteomic probes for fluorescent imaging of fucosylated glycans *in vivo*. Proc.Natl.Acad.Sci.U.S.A. ***103*** 12371. PMID: 16895981.