



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

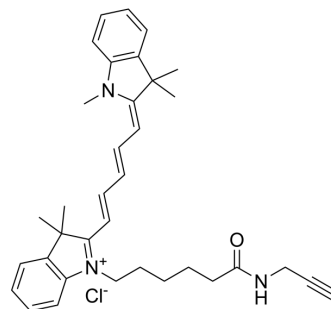
mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Cyanine5 alkyne

Cat. No.:	HY-137042
CAS No.:	1223357-57-0
Molecular Formula:	C ₃₅ H ₄₂ ClN ₃ O
Molecular Weight:	556.18
Target:	Mitochondrial Metabolism; Oxidative Phosphorylation
Pathway:	Metabolic Enzyme/Protease
Storage:	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (224.75 mM; Need ultrasonic)

	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
Preparing Stock Solutions	1 mM		1.7980 mL	8.9899 mL	17.9798 mL
	5 mM		0.3596 mL	1.7980 mL	3.5960 mL
	10 mM		0.1798 mL	0.8990 mL	1.7980 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Cyanine5 alkyne (Alkyne-Cy5) is a fluorescent dye used to label azide proteins and can be used to analyse post-translational modifications of proteins, glycosylation etc. Cyanine5 alkyne can also be used as a mitochondrial OXPHOS inhibitor to inhibit the growth of cancer stem cells (CSC)^{[1][2]}. Cyanine5 alkyne is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.

In Vitro

Cyanine5 alkyne (Alkyne-Cy5) (1-1000 nM) significantly inhibits 3D mammosphere formation in MCF7 cells between 500 nM and 1000 nM and can act as a mitochondrial oxidative phosphorylation (OXPHOS) inhibitor, inducing glycolysis to compensate for mitochondrial ATP depletion^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Amanda R Burnham-Marusich, et al. Size-matched alkyne-conjugated cyanine fluorophores to identify differences in protein glycosylation. Electrophoresis. 2014 Sep;35(18):2621-5.

[2]. Camillo Sargiacomo, et al. MitoTracker Deep Red (MTDR) Is a Metabolic Inhibitor for Targeting Mitochondria and Eradicating Cancer Stem Cells (CSCs), With Anti-Tumor and Anti-Metastatic Activity In Vivo. Front Oncol. 2021 Jul 30;11:678343.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA