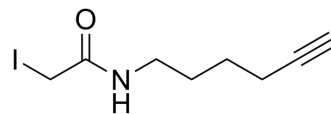


IA-Alkyne

Cat. No.:	HY-136205
CAS No.:	930800-38-7
Molecular Formula:	C ₈ H ₁₂ I _{NO}
Molecular Weight:	265.09
Target:	TRP Channel
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (377.23 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	3.7723 mL	18.8615 mL	37.7230 mL
				5 mM	0.7545 mL	3.7723 mL	7.5446 mL
				10 mM	0.3772 mL	1.8862 mL	3.7723 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (9.43 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (9.43 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (9.43 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	IA-Alkyne (Iodoacetamide-alkyne; N-Hex-5-ynyl-2-iodo-acetamide) is a TRP channel (TRPC) agonist and has the potential for the study of respiratory infection ^[1] . IA-Alkyne can be used to develop an isotopically tagged probe for quantitative cysteine-reactivity profiling ^[2] . IA-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.
IC ₅₀ & Target	IC50: TRPC ^[1]
In Vitro	IA-alkyne (2.5-10 μM; 1 hour) can react with cysteines. Soluble fractions of HeLa cell lysates (2.0 mg/ml) are treated with IA-alkyne. Labeled proteome samples are conjugated with a fluorescent rhodamine-azide tag through CuAAC, and analyzed by

SDS-PAGE. In-gel fluorescence imaging reveals that IA-alkyne has a strong fluorescent intensity^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. David L. Use of trp channel agonists to treat infections. Patent US20130203715A1.

[2]. Zorin NA, et al. Inhibition by iodoacetamide and acetylene of the H-D-exchange reaction catalyzed by Thiocapsa roseopersicina hydrogenase. Eur J Biochem. 1996 Oct 15;241(2):675-81.

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

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