Product Data Sheet

DiAzKs hydrochloride

Cat. No.: HY-D0853A CAS No.: 2421187-79-1 Molecular Formula: $C_{11}H_{21}CIN_4O_4$ 308.76

Molecular Weight:

Target: Fluorescent Dye

Pathway: Others

4°C, sealed storage, away from moisture and light Storage:

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 250 mg/mL (809.69 mM; Need ultrasonic) H₂O: 50 mg/mL (161.94 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.2388 mL	16.1938 mL	32.3876 mL
	5 mM	0.6478 mL	3.2388 mL	6.4775 mL
	10 mM	0.3239 mL	1.6194 mL	3.2388 mL

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

In Vivo

- 1. Add each solvent one by one: PBS Solubility: 50 mg/mL (161.94 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (6.74 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (6.74 mM); Clear solution

BIOLOGICAL ACTIVITY

Description DiAzKs (H-L-Photo-lysine) hydrochloride is a diazirine-containing lysine amino acid and is a photo-cross-linker. DiAzKs hydrochloride can site-selective incorporated into proteins and is used to crosslink protein-protein interactions in vitro and in living cells. DiAzKs hydrochloride acts as a UV light-activated photo-crosslinking probe^{[1][2][3]}.

> Photo-lysine, which is readily incorporated into proteins by native mammalian translation machinery, can be used to capture and identify proteins that recognize lysine post-translational modifications (PTMs), including 'readers' and 'erasers' of histone modifications^[2].

In Vitro

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

CUSTOMER VALIDATION

• Nat Biotechnol. 2021 Mar;39(3):347-356.

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REFERENCES

[1]. Ai HW, et al. Probing protein-protein interactions with a genetically encoded photo-crosslinking amino acid. Chembiochem. 2011 Aug 16;12(12):1854-7.

[2]. Chatterjee A, et al. Efficient viral delivery system for unnatural amino acid mutagenesis in mammalian cells. Proc Natl Acad Sci U S A. 2013 Jul 16;110(29):11803-8.

[3]. Yang T, et al. Photo-lysine captures proteins that bind lysine post-translational modifications. Nat Chem Biol. 2016 Feb;12(2):70-2.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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