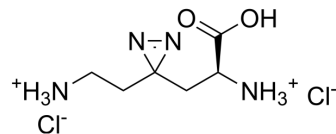


Photo-lysine hydrochloride

Cat. No.:	HY-19804A
Molecular Formula:	C ₆ H ₁₄ Cl ₂ N ₄ O ₂
Molecular Weight:	245.11
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

H₂O : ≥ 40 mg/mL (163.19 mM)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM	4.0798 mL	20.3990 mL	40.7980 mL
5 mM	0.8160 mL	4.0798 mL	8.1596 mL		
10 mM	0.4080 mL	2.0399 mL	4.0798 mL		

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

BIOLOGICAL ACTIVITY

Description

Photo-lysine hydrochloride, a new lysine-based photo-reactive amino acid, captures proteins that bind lysine post-translational modifications.

In Vitro

Photo-lysine is designed and synthesized by incorporating a photo-cross-linker (diazirine) into the side chain of natural lysine. 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. Photo-lysine can be incorporated into MDH2 and mediate photo-cross-linking to fix protein-protein interactions in cells. UV irradiation of cells in the presence of photo-lysine induced robust cross-linking of HSP90β and HSP60. Photo-lysine has higher efficiency than photo-leucine for photo-cross-linking of the two chaperone proteins. Photo-lysine enables capture of the heterodimer of proteins Ku70 and Ku80 within a protein complex. Photo-lysine enables identification of histone- and chromatin-binding proteins^[1].

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

CUSTOMER VALIDATION

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- bioRxiv. 2020 Feb.

See more customer validations on www.MedChemExpress.com

REFERENCES

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

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

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