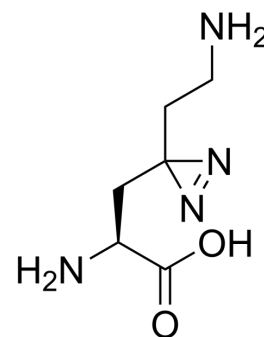


## Photo-lysine

<b>Cat. No.:</b>	HY-19804
<b>CAS No.:</b>	1863117-91-2
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>12</sub> N <sub>4</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	172.19
<b>Target:</b>	Biochemical Assay Reagents
<b>Pathway:</b>	Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Photo-lysine, a new lysine-based photo-reactive amino acid, captures proteins that bind lysine post-translational modifications.
<b>In Vitro</b>	<p>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<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### CUSTOMER VALIDATION

- bioRxiv. 2020 Feb.

See more customer validations on [www.MedChemExpress.com](http://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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