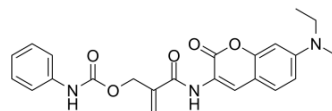


## AC-green

Cat. No.:	HY-D1258
Molecular Formula:	C <sub>24</sub> H <sub>25</sub> N <sub>3</sub> O <sub>5</sub>
Molecular Weight:	435.47
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	AC-green (VDP-green) is a β-allyl carbamate fluorescent probe for specifically imaging vicinal dithiol proteins (VDPs) in living systems ( $\lambda_{ex}/\lambda_{em}=400/475$ nm). AC-green can detect the reduced bovine serum albumin (rBSA) with high sensitivity. AC-green displays low toxicity and features high sensitivity, and is suitable for sensing VDPs in living cells and zebrafishes <sup>[1]</sup> .
<b>In Vitro</b>	<p>AC-green (VDP-green) can respond to VDPs with more than 60-fold increase of emission in aqueous solution, while there is no significant interference from biological thiols, amino acids or inorganic salts<sup>[1]</sup>.</p> <p>AC-green (2 μM; 90 min) has no apparent fluorescence signal within the pH range of 5.0-9.0. Addition of rBSA turns on the fluorescence<sup>[1]</sup>.</p> <p>AC-gree (10 μM) has low cytotoxicity in HepG2 cells and Hela cells<sup>[1]</sup>.</p> <p>AC-gree (10 μM; for 15 min) images VDPs in living HepG2 cells and bright green fluorescence appeared. This fluorescence is inhibited when the cells are pretreated with PAO, a popular specific ligand for protein vicinal dithiols<sup>[1]</sup>.</p> <p>AC-gree (10 μM; for 20 min) incubates with zebrafishes has a strong fluorescence signal appeared in the green channel<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

[1]. Lanning Zhao, et al. A β-allyl carbamate fluorescent probe for vicinal dithiol proteins. Chem Commun (Camb). 2020 Mar 5;56(19):2857-2860.

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

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