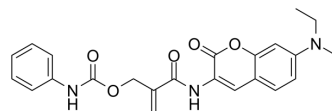


AC-green

Cat. No.:	HY-D1258
CAS No.:	2937705-58-1
Molecular Formula:	C ₂₄ H ₂₅ N ₃ O ₅
Molecular Weight:	435.47
Target:	Fluorescent Dye
Pathway:	Others
Storage:	-20°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 (229.64 mM; Need ultrasonic)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	2.2964 mL	11.4818 mL	22.9637 mL	
5 mM	0.4593 mL	2.2964 mL	4.5927 mL	
10 mM	0.2296 mL	1.1482 mL	2.2964 mL	

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

BIOLOGICAL ACTIVITY

Description

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^[1].

In Vitro

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^[1].

AC-green (2 μ M; 90 min) has no apparent fluorescence signal within the pH range of 5.0-9.0. Addition of rBSA turns on the fluorescence^[1].

AC-gree (10 μ M) has low cytotoxicity in HepG2 cells and Hela cells^[1].

AC-gree (10 μ M; 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^[1].

AC-gree (10 μ M; for 20 min) incubates with zebrafishes has a strong fluorescence signal appeared in the green channel^[1].

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

REFERENCES

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA