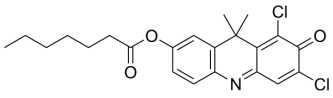
DDAO-C6

Cat. No.:	HY-150978
CAS No.:	2102418-90-4
Molecular Formula:	$C_{22}H_{23}Cl_2NO_3$
Molecular Weight:	420.33
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	DDAO-C6 is a cridone ester derivative, highly specific fluorescence for detecting human serum albumin (HSA). DDAO-C6 acts as an enzymatic activatable near-infrared fluorescent probe in visually sensing endogenous lipase from gut microbes (Ex/Em=600/658 nm)[1][2].
In Vitro	DDAO-C6 (10 μM; 30 min; 37 ⊠) shows a linear relationship between the fluorescence intensities and lipase concentrations (0-50 μg/mL), and products a red fluorescence signal in the presence of active lipase[1]. DDAO-C6 hydrolysates have fluorescence properties, with excitation wavelength=550-600 nm, emission spectrum=630-700 nm[2]. Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).Labeling of Intestinal Fungi[1]: 1. Disperse fresh intestinal secretions in sterile water and coate on a potato agar plate, containing penicillin (100 U/mL)/streptomycin (0.1 mg/mL) to inhibit intestinal bacteria. 2. Culture at 32 °C for about 5 days until the development of obvious fungal colonies. 3. Spray DDAO-C6 (100 μM) on colonies and incubate at 32 °C for 2 h. 4. Image plate samples on a Amersham Typhoon RGB (λex = 635 nm, λem = 670 ± 15 nm). MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	DDAO-C6 can be used to guide the rapid identification and cultivation of lipase active fungal strains from intestinal microbes in human feces, which is a potential technique for the biological investigation of intestinal microbes[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Cui J, et al. Application of highly specific fluorescent probe for detection of human serum albumin: China, CN106841128[P]. 2017-06-13.

[2]. Feng L, et al. Visual Identification of Trichosporon asahii, a Gut Yeast Associated with Obesity, Using an Enzymatic NIR Fluorescent Probe. Anal Chem. 2022.

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

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