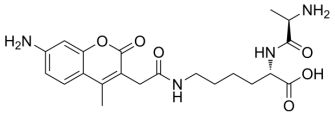
D-Ala-Lys-AMCA

Cat. No.:	HY-111956
CAS No.:	375822-19-8
Molecular Formula:	$C_{21}H_{28}N_4O_6$
Molecular Weight:	432.47
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	D-Ala-Lys-AMCA is a known proton-coupled oligopeptide transporter 1 (PEPT1) substrate that emits blue fluorescence. D-Ala-Lys-AMCA may be transported into liver cancer cells and Caco-2 cells based on fluorescence analysis. D-Ala-Lys-AMCA can be used for characterizing PEPT1-specific substrates or inhibitors[1][2].
In Vitro	D-Ala-Lys-AMCA (25, 50 and 150 μM, 3 h) may be transported into liver cancer and Caco-2 cells[1]. D-Ala-Lys-AMCA (25 μM, 10 min) can be uptaken by absorptive enterocytes of all small intestine segments, whereas there is a complete lack of fluorescence in colonic samples[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Groneberg DA, et al. Intestinal peptide transport: ex vivo uptake studies and localization of peptide carrier PEPT1. Am J Physiol Gastrointest Liver Physiol. 2001 Sep;281(3):G697-704.

[2]. Gong Y, et al. Specific expression of proton-coupled oligopeptide transporter 1 in primary hepatocarcinoma-anovel strategy for tumor-targeted therapy. Oncol Lett. 2017 Oct;14(4):4158-4166.

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