

Screening Libraries

Proteins

Product Data Sheet

DABCYL-GABA-Ser-Gln-Asn-Tyr-Pro-Ile-Val-Gln-EDANS

Cat. No.: HY-P5415 CAS No.: 127134-13-8 $C_{73}H_{97}N_{17}O_{18}S$ Molecular Formula:

Molecular Weight: 1532.72

Sequence: {DABCYL}-{GABA}-{Ser}-Gln-Asn-Tyr-Pro-Ile-Val-Gln-{EDANS}

Sequence Shortening: {DABCYL}-{GABA}-{Ser}-QNYPIVQ-{EDANS}

Others Target: Others Pathway:

Please store the product under the recommended conditions in the Certificate of Storage:

Analysis.

BIOLOGICAL ACTIVITY

Description

DABCYL-GABA-Ser-Gln-Asn-Tyr-Pro-Ile-Val-Gln-EDANS is a biological active peptide. (DABCYL-GABA-Ser-Gln-Asn-Tyr-Pro-Ile-Val-Gln-EDANS is also called HIV protease substrate I in some literature. It is widely used for the continuous assay for HIV protease activity. The 11-kD protease (PR) encoded by the human immunodeficiency virus 1 (HIV-1) is essential for the correct processing of viral polyproteins and the maturation of infectious virus, and is therefore a target for the design of selective acquired immunodeficiency syndrome (AIDS) therapeutics. The FRET-based fluorogenic substrate is derived from a natural processing site for HIV-1 PR. Incubation of recombinant HIV-1 PR with the fluorogenic substrate resulted in specific cleavage at the Tyr-Pro bond and a time-dependent increase in fluorescence intensity that is linearly related to the extent of substrate hydrolysis. The fluorescence quantum yields of the HIV-1 PR substrate in the FRET assay increased by 40.0- and 34.4-fold, respectively, per mole of substrate cleaved. Because of its simplicity and precision in the determination of reaction rates required for kinetic analysis, this substrate offers many advantages over the commonly used HPLC or electrophoresis-based assays for peptide substrate hydrolysis by retroviral PRs. Abs/Em = 340nm/490nm.)

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

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