

Caspase 3 (Apopain) Substrate 1, chromogenic Ac - DEVD - pNA

Product Code: 3037-0500

**Innopep
Peptide
Product**

Price: \$73.00

Short Description

Ac-DEVD-pNA

Description

Overview

Description

pNA (4-nitroaniline)-derived caspase substrates are widely used for the colorimetric detection of various caspase activities. Cleavage of pNA peptides by caspases generates pNA that is monitored colorimetrically at ~405 nm. pNA has maximum absorption around 408 nm. Caspase-1 substrate with $K_m = 18 \text{ uM}$ and $k_{cat} = 0.5 \text{ M}^{-1}\text{s}^{-1}$; Caspase-3 substrate with $K_m = 11 \text{ uM}$ and $k_{cat} = 2.4 \text{ M}^{-1}\text{s}^{-1}$; Caspase-4 substrate with $K_m = 32 \text{ uM}$ and $k_{cat} = 0.05 \text{ M}^{-1}\text{s}^{-1}$; Caspase-6 substrate with $K_m = 180 \text{ uM}$ and $k_{cat} = 0.6 \text{ M}^{-1}\text{s}^{-1}$; Caspase-7 substrate with $K_m = 12 \text{ uM}$ and $k_{cat} = 0.4 \text{ M}^{-1}\text{s}^{-1}$; Caspase-8 substrate with $K_m = 167 \text{ uM}$

Sequence

Sequence (3 Letter)

Molecular Weight

Properties

Purity

Ac-DEVD-pNA

Ac - Asp - Glu - Val - Asp - pNA

638.5

% Peak Area By HPLC ? 95%

Storage

-20 °C desiccated and protected from light

References

Grutter MG (2000). Caspases: key players in programmed cell death. *Curr Opin Struct Biol* 10, 649-55; Gastman BR (2001). Apoptosis and its clinical impact. *Head Neck* 23, 409-25; Grutter MG (2000). Caspases: key players in programmed cell death. *Curr Opin Struct Biol* 10, 649-55; Stennicke HR and Salvesen GS (1999). Catalytic properties of the caspases. *Cell Death Differ* 6, 1054-9; Stennicke HR and Salvesen GS (1998). Properties of the caspases. *Biochim Biophys Acta* 1387, 17-31; Thornberry NA and Lazebnik Y (1998). Caspases: enemies within. *Science* 281, 1312-6; Talanian RV, et al. (1997). Substrate specificities of caspase family proteases. *J Biol Chem* 272, 9677-82; Fassy F, et al. (1998). Enzymatic activity of two caspases related to interleukin-1 β -converting enzyme. *Eur J Biochem* 253, 76-83; Datta R, et al. (1996). Activation of the CPP32 protease in apoptosis induced by 1- β -D-arabinofuranosylcytosine and other DNA-damaging agents. *Blood* 88, 1936-43; Koeplinger KA, et al. (2000). Caspase 8: an efficient method for large-scale autoactivation of recombinant procaspase 8 by matrix adsorption and characterization of the active enzyme. *Protein Expr Purif* 18, 378-87.