# PRODUCT INFORMATION



## Ac-LEHD-pNA (trifluoroacetate salt)

Item No. 24570

Formal Name: (2S,5S,8S,11S)-5-((1H-imidazol-5-yl)methyl)-

> 8-(2-carboxyethyl)-11-isobutyl-2-(2-((4nitrophenyl)amino)-2-oxoethyl)-4,7,10,13tetraoxo-3,6,9,12-tetraazatetradecanoic acid,

2,2,2-trifluoroacetate

Synonyms: Ac-Leu-Glu-His-Asp-pNA, Caspase-9

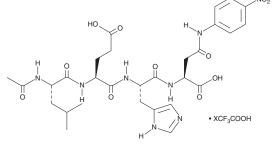
Chromogenic Substrate I

 $C_{29}H_{38}N_8O_{11}$ MF: FW: 674.7 **Purity:** ≥95%

A lyophilized powder Supplied as:

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



#### **Laboratory Procedures**

Ac-LEHD-pNA (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the Ac-LEHD-pNA (trifluoroacetate salt) in water. The solubility of Ac-LEHD-pNA (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Ac-LEHD-pNA is a substrate for caspase-9.1 Caspase-9 preferentially binds to and cleaves the Leu-Glu-His-Asp (LEHD) peptide sequence to release p-nitroalinide, which can be quantified by colorimetric detection at 405 nm as a measure of enzyme activity. 1-3

### References

- 1. Hsu, Y.L., Kuo, P.L., Lin, L.T., et al. Asiatic acid, a triterpene, induces apoptosis and cell cycle arrest through activation of extracellular signal-regulated kinase and p38 mitogen-activated protein kinase pathways in human breast cancer cells. J. Pharmacol. Exp. Ther. 313(1), 333-344 (2005).
- 2. Poreba, M., Stróżyk, A., Salvesen, G.S., et al. Caspase substrates and inhibitors. Cold Spring Harb. Perspect. Biol. 5(8), A008680 (2013).
- 3. Yu, M.-S., Suen, K.-C., Kwok, N.-S., et al. Beta-amyloid peptides induces neuronal apoptosis via a mechanism independent of unfolded protein responses. Apoptosis 11(5), 687-700 (2006).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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