



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

N-Succinyl-Leu-Leu-Val-Tyr 7-Amido-4-Methylcoumarin

Product Number **S 6510**

Storage Temperature -0°C

Product Description

Molecular Formula: $\text{C}_{40}\text{H}_{53}\text{N}_5\text{O}_{10}$

Molecular Weight: 763.9

CAS Number: 94367-21-2

This peptide is an inhibitor of neuronal nitric oxide synthase.¹ It has been described as a substrate for heat-shock protein 90 (HSP90)² and for proteasome.³ It has also been described as an inhibitor of chymotrypsin-like enzymes,⁴ and as a substrate for chymotrypsin.⁵

When a C-terminal 7-amino-4-methylcoumarin-containing peptide is hydrolyzed, the fluorescent compound 7-amino-4-methylcoumarin is released. This compound is monitored by excitation at 380 nm and emission at 460 nm.⁵ However, these wavelengths do not represent the excitation and emission maxima. It has been reported that in 50 mM TES buffer, pH 8.0, containing 10 mM calcium chloride, the excitation maximum is at 345 nm and the emission maximum is at 445 nm.

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in DMSO (5 mg/ml). To make a solution, add the appropriate amount of DMSO to the vial, close tightly, and shake well.

Storage/Stability

The solution of this product in DMSO is stable at -20°C for more than 1 month, if it is protected from moisture and kept in the dark.

References

1. Hu, J., et al., Polyamines inhibit nitric oxide synthase in rat cerebellum. *Neuroscience Letters*, **175(1-2)**, 41-45 (1994).
2. Montel V., et al., Heat-shock protein 90: intrinsic peptidase activity and *in vitro* long-term self-processing. *Life Sci.*, **67(13)**, 1585-1600 (2000).
3. Wilk S. and Figueiredo-Pereira M. E., Synthetic inhibitors of the multicatalytic proteinase complex (proteasome). *Enzyme Protein*, **47(4-6)**, 306-313 (1993).
4. Sawada, H., et al., Ascidian Sperm chymotrypsin-like enzyme; participation in fertilization. *Experientia*, **39(4)**, 377-378 (1983).
5. Zimmerman M, et al., A new fluorogenic substrate for chymotrypsin. *Anal. Biochem.*, **70(1)**, 258-262 (1976).

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