

PRODUCT INFORMATION



HMB-Val-Ser-Leu-VE

Item No. 10007713

CAS Registry No.: 862891-04-1
Formal Name: N-(3-hydroxy-2-methylbenzoyl)-L-valyl-N-[(1S,2E)-4-ethoxy-1-(2-methylpropyl)-4-oxo-2-butenyl]-L-serinamide

MF: C₂₆H₃₉N₃O₇

FW: 505.6

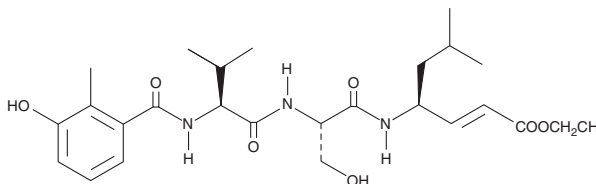
Purity: ≥98%

UV/Vis.: λ_{max}: 210 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

HMB-Val-Ser-Leu-VE is supplied as a crystalline solid. A stock solution may be made by dissolving the HMB-Val-Ser-Leu-VE in the solvent of choice, which should be purged with an inert gas. HMB-Val-Ser-Leu-VE is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of HMB-Val-Ser-Leu-VE in ethanol and DMF is approximately 20 mg/ml and approximately 30 mg/ml in DMSO.

HMB-Val-Ser-Leu-VE is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, HMB-Val-Ser-Leu-VE should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. HMB-Val-Ser-Leu-VE has a solubility of approximately 0.5 mg/ml in a 1:10 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

HMB-Val-Ser-Leu-VE is a cell-permeable vinyl ester tripeptide inhibitor of the trypsin-like activity of the 20S proteasome (IC₅₀ = 0.033 μM).¹ It is selective for the trypsin-like activity over the chymotryptic- or post-acidic-like activities (IC₅₀s = >10 μM for both). HMB-Val-Ser-Leu-VE is active against *T. brucei* (GI₅₀ = 31.6 μM).²

References

1. Marastoni, M., Baldisserotto, A., Cellini, S., *et al.* Peptidyl vinyl ester derivatives: New class of selective inhibitors of proteasome trypsin-like activity. *J. Med. Chem.* **48**, 5038-5042 (2005).
2. Steverding, D., Baldisserotto, A., Wang, X., *et al.* Trypanocidal activity of peptidyl vinyl ester derivatives selective for inhibition of mammalian proteasome trypsin-like activity. *Exp. Parasitol.* **128(4)**, 444-447 (2011).

WARNING

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

SAFETY DATA

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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