

PRODUCT INFORMATION

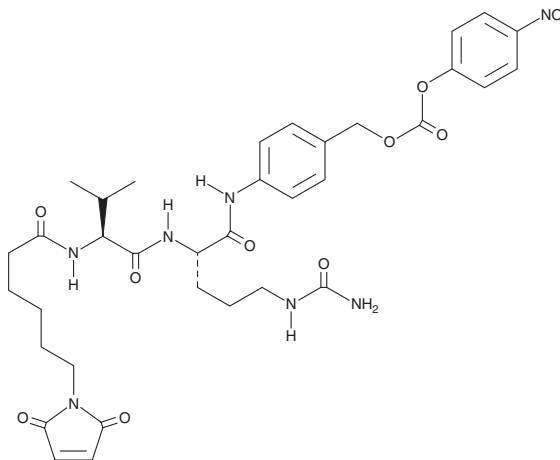


Mc-Val-Cit-PABC-PNP

Item No. 23881

CAS Registry No.: 159857-81-5
Formal Name: N-[6-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxohexyl]-L-valyl-N⁵-(aminocarbonyl)-N-[4-[[[(4-nitrophenoxy)carbonyl]oxy]methyl]phenyl]-L-ornithinamide
Synonym: Maleimidocaproyl-L-Valine-L-Citrulline-*p*-Aminobenzyl Alcohol *p*-Nitrophenyl Carbonate

MF: C₃₅H₄₃N₇O₁₁
FW: 737.8
Purity: ≥98%
UV/Vis.: λ_{max}: 254 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

Mc-Val-Cit-PABC-PNP is supplied as a crystalline solid. A stock solution may be made by dissolving the Mc-Val-Cit-PABC-PNP in the solvent of choice, which should be purged with an inert gas. Mc-Val-Cit-PABC-PNP is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of Mc-Val-Cit-PABC-PNP in these solvents is approximately 20 and 25 mg/ml, respectively.

Mc-Val-Cit-PABC-PNP is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Mc-Val-Cit-PABC-PNP should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Mc-Val-Cit-PABC-PNP has a solubility of approximately 0.20 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Mc-Val-Cit-PABC-PNP is a peptide linker molecule used in the synthesis of antibody-drug conjugates (ADCs).¹ It contains a maleimidocaproyl (Mc) group that can be conjugated to an antibody and a *p*-nitrophenol (PNP) group that allows the peptide to be linked to anticancer compounds, such as doxorubicin (Item No. 15007) or monomethyl auristatin E (MMAE; Item No. 16267).^{1,2} ADCs target specific cell populations to induce a selective response, such as cell death in cancer cells.

References

1. Jeffrey, S.C., Nguyen, M.T., Andreyka, J.B., *et al.* Dipeptide-based highly potent doxorubicin antibody conjugates. *Bioorg. Med. Chem. Lett.* **16(2)**, 358-362 (2006).
2. Doronina, S.O., Mendelsohn, B.A., Bovee, T.D., *et al.* Enhanced activity of monomethylauristatin F through monoclonal antibody delivery: Effects of linker technology on efficacy and toxicity. *Biconjug. Chem.* **17(1)**, 114-124 (2006).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/05/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM