

Product Data Sheet

Product Name: Acetyl-pepstatin ammonium

Cat. No.: GC81868

Chemical Properties

Cas. No.

Formula $C_{31}H_{60}N_6O_9$ M.Wt 660.84

Solubility DMSO: 20 mg/mL (30.26 mM; Need ultrasonic) Storage Sealed storage, away from moisture

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Acetyl-pepstatin ammonium is an aspartic protease (PRs) inhibitor that targets HIV-1 protease and XMRV protease with K_i values of 13 nM and 712 nM, respectively. Acetyl-pepstatin ammonium inhibits XMRV protease by blocking cleavage through mixed-mode binding. Acetyl-pepstatin ammonium can be used in research related to HIV-1 and XMRV infection [1].

In Vitro, Acetyl-pepstatin (1 h) ammonium inhibits recombinant XMRV PR in an HPLC-based protease assay with an apparent K_i of 712 nM, and inhibits recombinant HIV-1 PR with an apparent

Caution: Product has not been fully validated for medical applications. For research use only.

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Ki of 13 nM^[1]. Acetyl-pepstatin (3.0 μ M; 1 h) ammonium produces 50% inhibition of XMRV PR-mediated cleavage of recombinant MLV Gag fragments in SDS-PAGE experiments^[1]. Acetyl-pepstatin ammonium binds XMRV PR in a mixed mode, involving two half-occupied head-to-head molecules and one half-occupied standard-mode molecule, as determined by the 2.0 Å crystal structure PDB 4EXH^[1].

References:

[1]. Matúz K, et al. Inhibition of XMRV and HIV-1 proteases by pepstatin A and acetyl-pepstatin. The FEBS journal. 2012 Sep;279(17):3276-86.

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