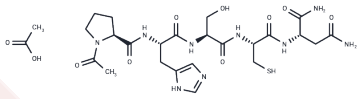
Data Sheet (Cat.No.T10398L)

TargetMol

ATN-161 acetate

Chemical Properties



CAS No. : 904763-58-2

Formula: C25H39N9O10S

Molecular Weight: 657.7

Storage: Keep away from moisture,Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	ATN-161 acetate, a pentapeptide compound derived from the synergistic region of fibronectin, is a non-competitive integrin-alpha5 antagonist with antitumor activity that attenuates the pathology of caerulein-induced acute pancreatitis.
Targets(IC50)	Integrin
In vitro	The treatment regimen of ATN-161 acetate in combination with 5-FU was able to significantly inhibit the proliferation of tumor cells compared to control and monotherapy. In addition, the combination treatment significantly increased the proportion of TUNEL-positive tumor cells, while monotherapy failed to increase TUNEL-positive cells. ATN-161 acetate significantly reduced the number of cancer cells after 48 hours of culture (21% reduction) compared to the control group. [1] ATN-161 acetate prevented vascular endothelial growth factor-induced migration and capillary formation of hCECs, but had no significant effect on proliferation. Starting at 100 nM, ATN-161 acetate decreased the number of cells migrating in response to VEGF in a dose-dependent manner (compared to the VEGF group). [2]
In vivo	Injection of ATN-161 acetate after laser photocoagulation reduced choroidal neovascularization (CNV) leakage and neovascularization with an inhibitory effect comparable to that of AF564. [2]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5205 mL	7.6023 mL	15.2045 mL
5 mM	0.3041 mL	1.5205 mL	3.0409 mL
10 mM	0.152 mL	0.7602 mL	1.5205 mL
50 mM	0.0304 mL	0.152 mL	0.3041 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

1. Stoeltzing O, et al. Inhibition of integrin alpha5beta1 function with a small peptide (ATN-161) plus continuous 5-FU infusion reduces colorectal liver metastases and improves survival in mice. Int J Cancer. 2003 Apr 20;104(4): 496-503.
Wang W, et al. The antiangiogenic effects of integrin alpha5beta1 inhibitor (ATN-161) in vitro and in vivo. Invest Ophthalmol Vis Sci. 2011 Sep 14;52(10):7213-20.