Product Data Sheet

Product Name:	Aristeromycin
Cat. No.:	GC35387

Chemical Properties

Cas. No.	19186-33-5		
SMILES	O[C@@H]1[C@H](O)[C@@H](CO)C[C@H]1N2C3=NC=NC(N)=C3N=C2		
Formula	$C_{11}H_{15}N_5O_3$	M.Wt	265.27
Solubility	DMSO : 50 mg/mL (188.49 mM; ultrasonic and warming and heat to 60°C)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Aristeromycin		

Background

Aristeromycin, an adenosine analog, is an antibiotic and a potent S-adenosylhomocysteine hydrolase (AHCY) inhibitor[1][2]. S-adenosylhomocysteine hydrolase[1]

The IC50 value of Aristeromycin against AHCY is 38.5 nM at 50 μM S-adenosylhomocysteine (SAH) (approximately equal to the Km: 48 μM), but 271 nM at 1000 &#181M SAH (20× Km). With 60 min of preincubation, the mean IC50 value of Aristeromycin at 50 μM SAH is 12.7 nM[1].Aristeromycin has IC50 values of 3.2 μM for LNCaP-FGC cell growth and 0.88 μM for LNCaP-hr cell growth[1].At least in part, Aristeromycin can regulate oncogenic EZH2 expression by inducing miR-26a[1].

[1]. Uchiyama N, et al. Aristeromycin and DZNeP cause growth inhibition of prostate cancer via induction of mir-26a. Eur J Pharmacol. 2017 Oct 5;812:138-146. [2]. Ishikura T, et al. Inhibition of S-adenosylhomocysteine hydrolase by purine nucleoside analogues. Nucleic Acids Symp Ser. 1983;(12):119-22.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA