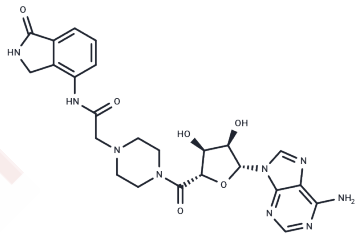
Data Sheet (Cat.No.T11143)

TargetMol

EB-47

Chemical Properties



CAS No. : 366454-36-6

Formula: C24H27N9O6

Molecular Weight: 537.53

Storage: 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	EB-47 mimics the substrate NAD+ and extends from the nicotinamide to the adenosine subsite.EB-47, a potent and selective PARP-1/ARTD-1 inhibitor with an IC50 value of 45 nM, shows modest potency against ARTD5 with an IC50 value of 410 nM.
Targets(IC50)	PARP
In vitro	The inhibitory effect of EB-47 on CdPARP and HsPARP was 0.86 and 1.0uM with IC50 value respectively, and the inhibitory effect on CdPARP was over 50%[1].
In vivo	EB-47, at a concentration of 2 μM for a duration of 5 days, reduces the number of embryo implantation sites and the quantity of blastocysts observed on day 5. PARP1 is involved in the embryo implantation process[1].

Solubility Information

Solubility	DMSO: 60 mg/mL (111.62 mM),Sonication is recommended. H2O: 100 mg/mL (186.04 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8604 mL	9.3018 mL	18.6036 mL
5 mM	0.3721 mL	1.8604 mL	3.7207 mL
10 mM	0.186 mL	0.9302 mL	1.8604 mL
50 mM	0.0372 mL	0.186 mL	0.3721 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

Haikarainen T, et al. Evaluation and Structural Basis for the Inhibition of Tankyrases by PARP Inhibitors.ACS Med Chem Lett. 2013 Nov 20;5(1):18-22.

García-Saura AG, et al. Comparative inhibitory profile and distribution of bacterial PARPs, using Clostridioides difficile CD160 PARP as a model. Sci Rep. 2018 May 23;8(1):8056.

Joshi A, et al.PARP1 during embryo implantation and its upregulation by oestradiol in mice.Reproduction. 2014 Jun;147(6):765-80.

Jagtap PG, et al. The discovery and synthesis of novel adenosine substituted 2,3-dihydro-1H-isoindol-1-ones: potent inhibitors of poly(ADP-ribose) polymerase-1 (PARP-1).Bioorg Med Chem Lett. 2004 Jan 5;14(1):81-5.