# Data Sheet (Cat.No.T19301)

C11H16N2O9



#### **DUPA**

Formula:

# **Chemical Properties**

CAS No.: 302941-52-2

Molecular Weight: 320.25

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

# **Biological Description**

Description	DUPA (N,N"-Carbonylbis[L-glutamic acid]) is used as the targeting moiety to actively deliver DTX for treatment of Prostate-Specific Membrane Antigen (PSMA) expressing prostate cancer.		
Targets(IC50)	PSMA,Ligands for Target Protein for PROTAC		
In vitro	DUPA is utilized as a targeting moiety to actively deliver Docetaxel (DTX) for treating prostate-specific membrane antigen (PSMA)-expressing prostate cancer.		
In vivo	As determined by loss of body weight and death of treated mice, DUPA-indenoisoquinoline conjugate induces a complete cessation of tumor growth with no toxicity[2].		

# **Solubility Information**

Solubility	DMSO: 280 mg/mL (874.32 mM), Sonication is recommended.	mg/mL (874.32 mM),Sonication is recommended.	
	H2O: 140 mg/mL (437.16 mM), Sonication is recommended.		
	(< 1 mg/ml refers to the product slightly soluble or insoluble)		

# **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	3.1226 mL	15.6128 mL	31.2256 mL
5 mM	0.6245 mL	3.1226 mL	6.2451 mL
10 mM	0.3123 mL	1.5613 mL	3.1226 mL
50 mM	0.0625 mL	0.3123 mL	0.6245 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.

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### Reference

Peng ZH, et al. Spacer length impacts the efficacy of targeted docetaxel conjugates in prostate-specific membrane antigen expressing prostate cancer. J Drug Target. 2013 Dec;21(10):968-80.

Roy J, et al. DUPA conjugation of a cytotoxic indenoisoquinoline topoisomerase I inhibitor for selective prostate cancer cell targeting. J Med Chem. 2015 Apr 9;58(7):3094-103.

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