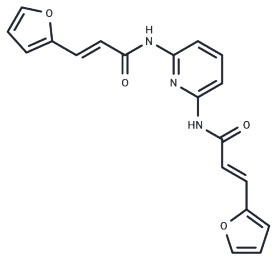
Data Sheet (Cat.No.T77743)

TargetMol

TT-012

Chemical Properties



CAS No. : 1164471-33-3

Formula: C19H15N3O4

Molecular Weight: 349.34

Storage: 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	TT-012 has anti-tumor activity, selectively binds dynamic MITF and disrupts the dimer formation and DNA binding of the latter. TT-012 can inhibit the transcription of MITF in B16F10 melanoma cells. TT-012 inhibited the growth and metastasis of MITF melanoma cells in animal models. TT-012 is less cytotoxic to liver and immune cells.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 100 mg/mL (286.25 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (28.63 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (28.63 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8625 mL	14.3127 mL	28.6254 mL
5 mM	0.5725 mL	2.8625 mL	5.7251 mL
10 mM	0.2863 mL	1.4313 mL	2.8625 mL
50 mM	0.0573 mL	0.2863 mL	0.5725 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

Liu Z, et al. A unique hyperdynamic dimer interface permits small molecule perturbation of the melanoma oncoprotein MITF for melanoma therapy. Cell Res. 2023 Jan;33(1):55-70.