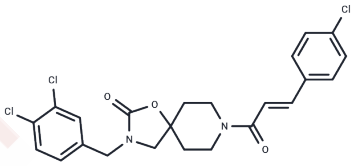
Data Sheet (Cat.No.T11498)

TargetMol

GSK682753A

Chemical Properties



CAS No. : 1334294-76-6

Formula: C23H21Cl3N2O3

Molecular Weight: 479.78

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	GSK682753A is a selective and highly potent inverse agonist of the Epstein-Barr virus-induced receptor 2 (EBI2) with an IC50 of 53.6 nM.
Targets(IC50)	Others,EBI2/GPR183
In vitro	GSK682753A exhibits dose-dependent inhibition of EBI2, achieving an IC50 of 53.6 nM. It demonstrates similar potency in inhibiting ERK phosphorylation, GTPγS binding, and activation of the cAMP-response element-binding protein (CREB). Additionally, GSK682753A acts as a selective and highly potent inverse agonist for both murine and human EBI2, effectively blocking G protein-dependent and potentially G protein-independent signals. In assays using cAMP-response element-binding protein-based reporters and guanosine 5'-3-O-(thio)-triphosphate (GTPγS) binding, GSK682753A shows a potency range of 2.6-53.6 nM and achieves an inhibitory efficacy of 75%.

Solubility Information

Solubility	DMSO: 27 mg/mL (56.28 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (4.17 mM),Sonication is recommended. *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	2.0843 mL	10.4214 mL	20.8429 mL
5 mM	0.4169 mL	2.0843 mL	4.1686 mL
10 mM	0.2084 mL	1.0421 mL	2.0843 mL
50 mM	0.0417 mL	0.2084 mL	0.4169 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

Benned-Jensen T, et al. Ligand modulation of the Epstein-Barr virus-induced seven-transmembrane receptor EBI2: identification of a potent and efficacious inverse agonist. J Biol Chem. 2011 Aug 19;286(33):29292-302.