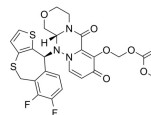


Product Datasheet

Physicochemical Properties	
Product Name	AV5124
Cat No.	V104018
Molecular Formula	C ₂₅ H ₂₁ F ₂ N ₃ O ₇ S ₂
Molecular Weight	577.58
CAS #	2417851-93-3
Appearance	White to off-white solid powder
Density	1.63±0.1 g/cm ³ (Temp: 20 °C; Press: 760 Torr)(Predicted)
Boiling Point	720.8±70.0 °C(Predicted)
LogP	0
Hydrogen Bond Acceptor Count	13
Rotatable Bond Count	6
Heavy Atom Count	39
Complexity	1080
Defined Atom Stereocenter Count	2
HS Tariff Code	2934.99.9001
Storage	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month Note: Please store this product in a sealed and protected environment (e.g. under nitrogen), avoid exposure to moisture and light.
Shipping Condition	Room temperature (This product is stable at ambient temperature for a few days during ordinary shipping and time spent in Customs)



Solubility Data	
Solubility (In Vitro)	May dissolve in DMSO (in most cases), if not, try other solvents such as H ₂ O, Ethanol, or DMF with a minute amount of products to avoid loss of samples
	<p>Note: Listed below are some common formulations that may be used to formulate products with low water solubility (e.g. < 1 mg/mL), you may test these formulations using a minute amount of products to avoid loss of samples.</p> <p style="text-align: center;">Injection Formulations (e.g. IP/IV/IM/SC)</p> <p>Injection Formulation 1: DMSO : Tween 80 □ Saline = 10 : 5 : 85 (i.e. 100 μL DMSO stock solution → 50 μL Tween 80 → 850 μL Saline) *Preparation of saline: Dissolve 0.9 g of sodium chloride in 100 mL ddH₂O to obtain a clear solution.</p> <p>Injection Formulation 2: DMSO : PEG300 □ Tween 80 : Saline = 10 : 40 : 5 : 45 (i.e. 100 μL DMSO → 400 μL PEG300 → 50 μL Tween 80 → 450 μL Saline)</p> <p>Injection Formulation 3: DMSO : Corn oil = 10 : 90 (i.e. 100 μL DMSO → 900 μL Corn oil) Example: Take the Injection Formulation 3 (DMSO : Corn oil = 10 : 90) as an example, if 1 mL of 2.5 mg/mL working solution is to be prepared, you can take 100 μL 25 mg/mL DMSO</p>

Products are for research use only · Not for human or veterinary use

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Solubility (In Vivo)	<p>stock solution and add to 900 µL corn oil, mix well to obtain a clear or suspension solution (2.5 mg/mL, ready for use in animals).</p> <p style="text-align: right;">▶ View More ▾</p> <hr/> <p style="text-align: center;">Oral Formulations</p> <p>Oral Formulation 1: Suspend in 0.5% CMC Na (carboxymethylcellulose sodium)</p> <p>Oral Formulation 2: Suspend in 0.5% Carboxymethyl cellulose</p> <p>Example: Take the Oral Formulation 1 (Suspend in 0.5% CMC Na) as an example, if 100 mL of 2.5 mg/mL working solution is to be prepared, you can first prepare 0.5% CMC Na solution by measuring 0.5 g CMC Na and dissolve it in 100 mL ddH₂O to obtain a clear solution; then add 250 mg of the product to 100 mL 0.5% CMC Na solution, to make the suspension solution (2.5 mg/mL, ready for use in animals).</p> <p style="text-align: right;">▶ View More ▾</p> <p>Note: Please be aware that the above formulations are for reference only. InvivoChem strongly recommends customers to read literature methods/protocols carefully before determining which formulation you should use for in vivo studies, as different compounds have different solubility properties and have to be formulated differently.</p> <hr/> <p style="color: red;">(Please use freshly prepared in vivo formulations for optimal results.)</p>
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Preparing Stock Solutions		1 mg	5 mg	10 mg
	1 mM	1.7314 mL	8.6568 mL	17.3136 mL
	5 mM	0.3463 mL	1.7314 mL	3.4627 mL
	10 mM	0.1731 mL	0.8657 mL	1.7314 mL

***Note:** Please select an appropriate solvent for the preparation of stock solution based on your experiment needs. For most products, DMSO can be used for preparing stock solutions (e.g. 5 mM, 10 mM, or 20 mM concentration); some products with high aqueous solubility may be dissolved in water directly. Solubility information is available at the above Solubility Data section. Once the stock solution is prepared, aliquot it to routine usage volumes and store at -20°C or -80°C. Avoid repeated freeze and thaw cycles.

Biological Activity Assay Protocols (From Reference)	
In vivo	AV5124 protected 60% of animals from mortality at a dose of 20 mg/kg, and completely protected mice from virus-induced mortality at a dose of 50 mg/kg.
References	[1]. Synthesis, inhibitory activity and oral dosing formulation of AV5124, the structural analogue of influenza virus endonuclease inhibitor baloxavir . J Antimicrob Chemother. 2021 Mar 12;76(4):1010-1018.

These protocols are for reference only. InvivoChem does not independently validate these methods.

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