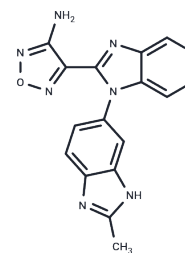


AS2863619 free base

## Chemical Properties

CAS No. : 2241300-50-3  
 Formula: C<sub>16</sub>H<sub>12</sub>N<sub>8</sub>O  
 Molecular Weight: 332.32  
 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	AS2863619 free base enables the conversion of antigen-specific effector/memory T cells into Foxp3+ regulatory T (Treg) cells. It is a potent, orally active CDK8 and CDK19 inhibitor (IC50s: 0.61 nM and 4.28 nM). STAT5 activation enhanced by AS2863619 free base inhibition of CDK8/19, which consequently activates the Foxp3 gene.
Targets(IC50)	CDK,STAT
In vitro	AS2863619 (1 μM; 22 hours; mouse CD4+ T cells) treatment reduces serine phosphorylation of the PSP motif of STAT5b to ~40% and increases tyrosine phosphorylation in the C-terminal domain to ~160% of control-treated samples.
In vivo	AS2863619 (30 mg/kg; p.o.; daily; for 2 weeks; mice) treatment after sensitization with DNFB dampens the degree of the secondary response, with milder infiltration of inflammatory cells into the skin and decreases ratios of IFN-γ+ cells in a skin contact hypersensitivity model, when compared with vehicle-treated control mice. Treg depletion before the elicitation of the secondary response abolishes AS2863619-induced suppression. KLRG1+ Foxp3+ T cells are specifically increased in DNFB sensitized AS2863619-treated mice.

## Solubility Information

Solubility	DMSO: 250 mg/mL (752.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 3.3 mg/mL (9.93 mM),Sonication is recommended. <i>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.</i>

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	3.0091 mL	15.0457 mL	30.0915 mL
5 mM	0.6018 mL	3.0091 mL	6.0183 mL
10 mM	0.3009 mL	1.5046 mL	3.0091 mL
50 mM	0.0602 mL	0.3009 mL	0.6018 mL

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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

Akamatsu M, et al. Conversion of antigen-specific effector/memory T cells into Foxp3-expressing Treg cells by inhibition of CDK8/19. *Sci Immunol.* 2019 Oct 25;4(40). pii: eaaw2707.

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