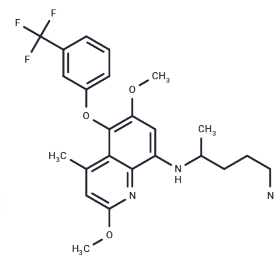


Tafenoquine

Chemical Properties

CAS No. :	106635-80-7
Formula:	C ₂₄ H ₂₈ F ₃ N ₃ O ₃
Molecular Weight:	463.49
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	Tafenoquine (WR 238605) is an antimalarial prophylactic agent with schizonticidal activity, useful in hemolytic anemia research.
Targets(IC50)	Parasite
In vitro	Methods: Tafenoquine (WR 238605) was treated with macrophage cell line RAW 264.7, and the in vitro toxicity was evaluated using the MTT assay after 24 hours. Results: The IC50 value of Tafenoquine against macrophage cell line RAW 264.7 was 5.9 µg/mL.[1]
In vivo	Methods: Tafenoquine (WR 238605) (3/6mg/kg, oral) was administered to normal C57BL/6 mice (WT) and humanized/CYP 2D6 knock-in mice, and the antimalarial activity of TQ against P. berghei expressing enzymes was evaluated by monitoring luminescence using an in vivo imaging system. Results: Tafenoquine at a dose of 3mg/kg showed no antimalarial activity in CYP 2D knock-out mice; when tested at 6mg/kg, the antimalarial activity of TQ in humanized/CYP 2D6 knock-in mice was partially restored.[1]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1575 mL	10.7877 mL	21.5754 mL
5 mM	0.4315 mL	2.1575 mL	4.3151 mL
10 mM	0.2158 mL	1.0788 mL	2.1575 mL
50 mM	0.0432 mL	0.2158 mL	0.4315 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

Marcisin SR, et al. Tafenoquine and NPC-1161B require CYP 2D metabolism for anti-malarial activity: implications for the 8-aminoquinoline class of anti-malarial compounds. Malar J. 2014 Jan 3;13:2.

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