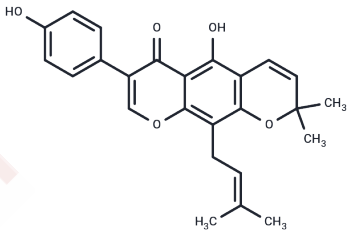
Data Sheet (Cat.No.TQ0072)

TargetMol

Warangalone

Chemical Properties



CAS No. : 4449-55-2

Formula: C25H24O5

Molecular Weight: 404.46

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	Warangalone is an anti-malarial compound that inhibits the growth of Plasmodium falciparum strains 3D7 (chloroquine-sensitive) and K1 (chloroquine-resistant) with IC50 values of 4.8 μg/mL and 3.7 μg/mL, respectively.
Targets(IC50)	Parasite,PKA
In vitro	Warangalone can also inhibit cyclic AMP-dependent protein kinase catalytic subunit (cAK) with an IC50 of 3.5 μM [2]. When HL-60 cells are exposed to Warangalone (30 μM) for 24 h, Warangalone induces a significant decrease (8%) in cell viability compared to controls. Warangalone also inhibits HL-60 cell growth within 24 h in a time-dependent fashion. A time-dependent increase in caspase-9 activity is observed in Warangalone-treated cells [3].
Kinase Assay	Cells are seeded in 24-well plates at a density of 3×10^6 cells per well. After exposure of the cells to Warangalone for the allotted time periods, the cells are washed three times with PBS and then lysed in a lysis buffer for 10 min on ice. The protein content of the cell lysates is assayed with a Micro BCA reagent. Cell lysates containing 50 μg of protein are incubated with a caspase-3 fluorogenic substrate (DEVD-AFC) or a caspase-9 fluorogenic substrate (LEHD-AFC) for 1 h at 37°C. Caspase activity is measured by fluorometric detection [3].
Cell Research	Cells are seeded in 96-well plates at a density of 1×10^5 cells per well. The cells are maintained for 24 h at 37°C and then Warangalone (30 μM) is added to the culture medium. MTS solution is added to the 96-well plates at the indicated time points, and the cells are incubated for 1 h at 37°C. The absorbance is measured at a wavelength of 490 nm with a microplate counter [3].

Solubility Information

Solubility	DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4724 mL	12.3622 mL	24.7243 mL
5 mM	0.4945 mL	2.4724 mL	4.9449 mL
10 mM	0.2472 mL	1.2362 mL	2.4724 mL
50 mM	0.0494 mL	0.2472 mL	0.4945 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

Tati Herlina, et al. ANTI-MALARIAL COMPOUND FROM THE STEM BARK OF Erythrina variegate. Indo. J. Chem., 2009, 9 (2), 308-311.
Wang BH, et al. Specific inhibition of cyclic AMP-dependent protein kinase by warangalone and robustic acid. Phytochemistry. 1997 Mar;44(5):787-96.
Induction of apoptosis by isoflavonoids from the leaves of Millettia taiwaniana in human leukemia HL-60 cells. Planta Med. 2006 Apr;72(5):424-9.

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