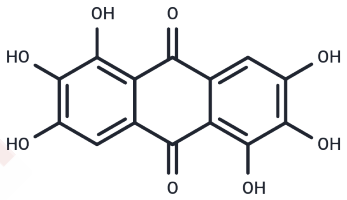
# Data Sheet (Cat.No.T26168)

TargetMol

## Rufigallol

### Chemical Properties



| | |
|---|---|
| CAS No. : | 82-12-2 |
| Formula: | C14H8O8 |
| Molecular Weight: | 304.21 |
| Storage: | Powder: -20°C for 3 years \| In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |

### Biological Description

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|---|---|
| Description | Rufigallol (AI3-00865) is an electron-deficient disk-shaped molecule with six hydroxyl groups and is a good unit for inducing the formation of DLC from non-planar AIE molecules, an anthraquinone derivative.Rufigallol induces the acquisition of DLC properties, while the introduction of TPE groups gives the molecular structure good fluorescence in the aggregated state.The remarkable synergistic in vitro antimalarial effect, in vivo with vitamin C and ketones was synergistic and showed antimalarial activity. |
| Targets(IC50) | Reactive Oxygen Species,Parasite,ROS |
| In vivo | Rufigallol, an anthraquinone derivative and exifone, a benzophenone derivative, in vitro, have remarkable synergistic antimalarial. We carried out antimalarial testing, in combination with rufigallol, in mice infected with Plasmodium berghei. Nine ketones, out of 20, showed good antimalarial activity, in vivo, when tested in combination with rufigallol, indicating the synergism between them.[1] |

### Solubility Information

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|---|---|
| Solubility | DMSO: 3.17 mg/mL (10.42 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.2872 mL | 16.436 mL | 32.872 mL |
| 5 mM | 0.6574 mL | 3.2872 mL | 6.5744 mL |
| 10 mM | 0.3287 mL | 1.6436 mL | 3.2872 mL |
| 50 mM | 0.0657 mL | 0.3287 mL | 0.6574 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

Mahajan SS, et al. Synergistic antimalarial activity of ketones with rufigallol and vitamin C. Parasitology. 2005;131 (4):459-466.
Dvinskikh SV, et al. Heteronuclear dipolar recoupling in liquid crystals and solids by PISEMA-type pulse sequences. J Magn Reson. 2003;164(1):165-170.
Dvinskikh SV, et al. Separated local field spectroscopy of columnar and nematic liquid crystals. J Magn Reson. 2003;163(1):46-55.
Winter RW,et al. Potentiation of an antimalarial oxidant drug. Antimicrob Agents Chemother. 1997;41(7):1449-1454.