

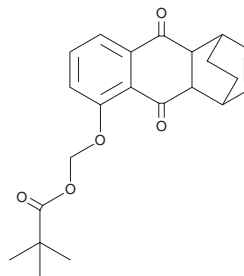
PRODUCT INFORMATION



MGR1

Item No. 27499

CAS Registry No.: 2361529-46-4
Formal Name: 2,2-dimethyl-propanoic acid, [(1,4,4a,9,9a,10-hexahydro-9,10-dioxo-1,4-ethanoanthracen-5-yl)oxy]methyl ester
MF: C₂₂H₂₄O₅
FW: 368.4
Purity: ≥98%
UV/Vis.: λ_{max}: 227, 316 nm
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

MGR1 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of MGR1 in these solvents is approximately 30 mg/ml.

Description

MGR1 is a probe that generates reactive oxygen species (ROS).¹ Upon activation by esterases, MGR1 produces superoxide *in vitro*, an effect that is reversed by superoxide dismutase (SOD). MGR1 produces ROS and increases production of oxidized phosphatidylserine species in HEK293T cells. It reduces viability of HEK293T cells (IC₅₀ = 5.1-6.3 μM).

Reference

1. Kelkar, D., Ravikumar, G., Mehendale, N., *et al.* A chemical-genetic screen identifies ABHD12 as an oxidized-phosphatidylserine lipase. *Nat. Chem. Biol.* **15**(2), 169-178 (2019).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/09/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM