

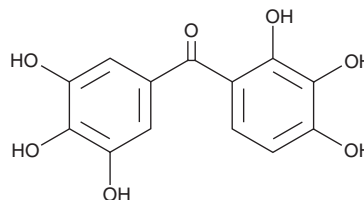
PRODUCT INFORMATION



Exifone

Item No. 46197

CAS Registry No.: 52479-85-3
Formal Name: (2,3,4-trihydroxyphenyl)
(3,4,5-trihydroxyphenyl)-methanone
Synonyms: Adlone,
Hexahydro-2,3,4,4',5'-benzophenone,
NSC 680919
MF: C₁₃H₁₀O₇
FW: 278.2
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Exifone is supplied as a solid. A stock solution may be made by dissolving the exifone in the solvent of choice, which should be purged with an inert gas. Exifone is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

Exifone is an activator of histone deacetylase 1 (HDAC1).¹ It increases the deacetylase activity of HDAC1 toward acetylated substrates histones H3 and H4 and p53 (EC₅₀s = 0.031, 0.045, and 0.065 μM, respectively). Exifone decreases histone acetylation levels in neural progenitor cells (NPCs) derived from human induced pluripotent stem cells (iPSCs) and increases the viability of neuronal cells derived from frontotemporal dementia patient-derived iPSCs. It decreases exploration activity in mice in the staircase exploratory test, an indication of improved memory and increases the passive avoidance response in a mouse model of amnesia induced by scopolamine (Item No. 40307).² Exifone also inhibits the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) main protease (M^{pro}), also known as 3C-like protease (3CL^{pro}; IC₅₀ = 3.18 μM).³

References

1. Patnaik, D., Pao, P.-C., Zhao, W.-N., *et al.* Exifone is a potent HDAC1 activator with neuroprotective activity in human neuronal models of neurodegeneration. *ACS Chem. Neurosci.* **12**(2), 271-284 (2021).
2. Porsolt, R.D., Lenègre, A., Avril, I., *et al.* The effects of exifone, a new agent for senile memory disorder, on two models of memory in the mouse. *Pharmacol. Biochem. Behav.* **27**(2), 253-256 (1987).
3. Lu, J., Tang, Y., Li, H., *et al.* Identifying exifone as a dual-target agent targeting both SARS-CoV-2 3CL protease and the ACE2/S-RBD interaction among clinical polyphenolic compounds. *Int. J. Mol. Sci.* **26**(5), 2243 (2025).

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, 07/30/2026

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