

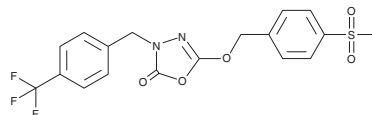
PRODUCT INFORMATION



ABD646

Item No. 44548

Formal Name: 5-((4-(methylsulfonyl)benzyl)oxy)-3-(4-(trifluoromethyl)benzyl)-1,3,4-oxadiazol-2(3H)-one
MF: C₁₈H₁₅F₃N₂O₅S
FW: 428.4
Purity: ≥98%
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

ABD646 is supplied as a solid. A stock solution may be made by dissolving the ABD646 in the solvent of choice, which should be purged with an inert gas. ABD646 is soluble (≥10 mg/ml) in DMSO.

Description

ABD646 is an inhibitor of α/β -hydrolase domain-containing protein 18 (ABHD18).¹ It reduces ABHD18 activity in a mass spectrometry activity-based protein profiling (MS-ABPP) analysis using a 1:1 mixture of THP-1:COLO 205 cell lysates at 1 and 10 μ M. ABD646 reduces the ratio of monolysocardiolipin to cardiolipin (MLCL:CL) in HAP1 tafazzin-knockout cells when used at a concentration of 5 μ M. It also reduces the MLCL:CL ratio, improves mitochondrial respiratory chain activity, and improves mitochondrial morphology in skin fibroblasts derived from patients with Barth syndrome, an X-linked disorder associated with mutations in *TAFAZZIN*. ABD646 (1 μ M) improves heart morphology in tafazzin-deficient zebrafish embryos.

Reference

1. Masud, S.N., Srivastava, A., Mero, P., *et al.* Genetic suppression features *ABHD18* as a Barth syndrome therapeutic target. *Nature* **645**(8082), 1029-1038 (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

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