Proteins

# Inhibitors

## DHODH-IN-26

Cat. No.: HY-158023

Molecular Formula:  $C_{44}H_{34}BrF_2N_2O_3P$ 

Molecular Weight: 787.63

Reactive Oxygen Species; Dihydroorotate Dehydrogenase; Ferroptosis Target:

Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κΒ; Apoptosis Pathway:

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

**Product** Data Sheet

#### **BIOLOGICAL ACTIVITY**

Description

DHODH-IN-26 (compound B2) is a mitochondria-targeting DHODH inhibitor. DHODH-IN-26 shows anticancer activity, triggers the formation of reactive oxygen species (ROS), promots mitochondrial lipid peroxidation, and induces ferroptosis<sup>[1]</sup>.

In Vitro

DHODH-IN-26 (compound B2) (0.01-100 μM, 72 h) inhibits cell growth of 4T1, B16F10, U251, GL261, SH-SY5Y, U87, and A375 cells<sup>[1]</sup>.

DHODH-IN-26 (50 and 100 nM) inhibits colony formation in B16F10 and A375 cells<sup>[1]</sup>.

DHODH-IN-26 (50 and 100 nM, 48 h) decreases the expression of PD-L1 in B16F10 and A375 cells<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay<sup>[1]</sup>

Cell Line:	4T1, B16F10, U251, GL261, SH-SY5Y, U87, and A375 cells
Concentration:	0.01, 0.1, 1, 10 and100 μM
Incubation Time:	72 h
Result:	Inhibited cell growth.

### Western Blot Analysis<sup>[1]</sup>

Cell Line:	B16F10 and A375 cells
Concentration:	50 and 100 nM
Incubation Time:	48 h
Result:	Decreased the expression of PD-L1.

#### In Vivo

DHODH-IN-26 (compound B2) (intraperitoneal injection, 50 mg/kg for 14 days) inhibits tumor growth in B16F10 xenograft model in C57BL/6 mice<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

	[1]
Animal Model:	B16F10 xenograft model in C57BL/6 mice <sup>[1]</sup>

Dosage:	50 mg/kg
Administration:	I.p.; for 14 days
Result:	Reduced tumor volume.

#### **REFERENCES**

[1]. Hai Y, et al. A novel mitochondria-targeting DHODH inhibitor induces robust ferroptosis and alleviates immune suppression. Pharmacol Res. 2024;202:107115.

Caution: Product has not been fully validated for medical applications. For research use only.

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Page 2 of 2 www.MedChemExpress.com