

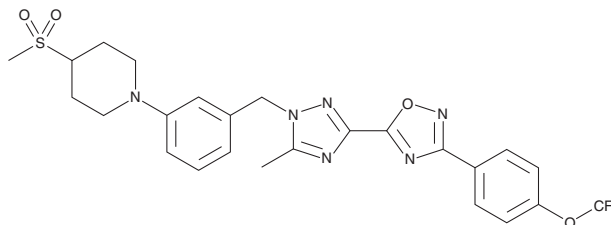
PRODUCT INFORMATION



IACS-010759

Item No. 25867

CAS Registry No.: 1570496-34-2
Formal Name: 4-(methylsulfonyl)-1-[3-[[5-methyl-3-[3-[4-(trifluoromethoxy)phenyl]-1,2,4-oxadiazol-5-yl]-1H-1,2,4-triazol-1-yl]methyl]phenyl]-piperidine
MF: C₂₅H₂₅F₃N₆O₄S
FW: 562.6
Purity: ≥98%
UV/Vis.: λ_{max}: 244 nm
Supplied as: A crystalline 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

IACS-010759 is supplied as a crystalline solid. A stock solution may be made by dissolving the IACS-010759 in the solvent of choice, which should be purged with an inert gas. IACS-010759 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of IACS-010759 in these solvents is approximately 0.2 and 0.1 mg/ml, respectively. IACS-010759 is slightly soluble in ethanol.

Description

IACS-010759 is an orally bioavailable inhibitor of complex I of the mitochondrial electron transport chain.^{1,2} It inhibits the ubiquinone reduction activity of isolated murine mitochondrial complex I when used at a concentration of 60 nM.¹ IACS-010759 (100 nM) reduces basal and spare respiratory capacities and increases glycolytic flux in primary chronic lymphocytic leukemia (CLL) cells.² It also induces apoptosis in CLL cells grown under low glucose conditions or when administered in combination with 2-deoxy-D-glucose (Item No. 14325). IACS-010759 (5 and 10 mg/ml) induces tumor regression in a glycolysis-deficient NB1 mouse xenograft model.¹

References

1. Molina, J.R., Sun, Y., Protopopova, M., *et al.* An inhibitor of oxidative phosphorylation exploits cancer vulnerability. *Nat. Med.* **24(7)**, 1036-1046 (2018).
2. Vangapandu, H.V., Alston, B., Morse, J., *et al.* Biological and metabolic effects of IACS-010759, an OxPhos inhibitor, on chronic lymphocytic leukemia cells. *Oncotarget* **9(38)**, 24980-24991 (2018).

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.

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