

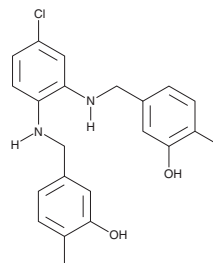
PRODUCT INFORMATION



DRB18

Item No. 38217

CAS Registry No.: 2863686-81-9
Formal Name: 5,5'-(((4-chloro-1,2-phenylene)bis(azanediyl))bis(methylene))bis(2-methylphenol)
MF: C₂₂H₂₃ClN₂O₂
FW: 382.9
Purity: ≥98%
UV/Vis.: λ_{max}: 223 nm
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

DRB18 is supplied as a solid. A stock solution may be made by dissolving the DRB18 in the solvent of choice, which should be purged with an inert gas. DRB18 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of DRB18 in these solvents is approximately 20 mg/ml.

Description

DRB18 is a pan-inhibitor of glucose transporters (Gluts).¹ It inhibits glucose uptake in HEK293 cells expressing Glut1, Glut2, Glut3, or Glut4 (IC₅₀s = 2.6, 8.8, 4.5, and 0.9 μM, respectively) and in A549 and H1299 non-small cell lung cancer (NSCLC) cells (IC₅₀s = 2.5 and 1.9 μM, respectively). DRB18 (10 μM) decreases the oxygen consumption rate (OCR) in a time-dependent manner, induces cell cycle arrest at the G₁/S phase, and increases the levels of reactive oxygen species (ROS) in A549 cells. It decreases tumor volume and weight in an A549 mouse xenograft model when administered at a dose of 10 mg/kg.

Reference

1. Shriwas, P., Roberts, D., Li, Y., *et al.* A small-molecule pan-class I glucose transporter inhibitor reduces cancer cell proliferation in vitro and tumor growth in vivo by targeting glucose-based metabolism. *Cancer Metab.* **9**(1), 14 (2021).

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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