

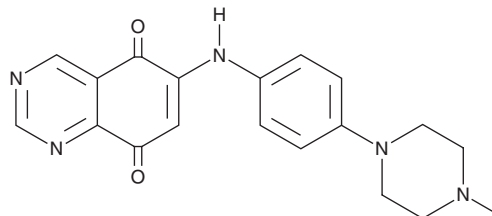
PRODUCT INFORMATION



QD-394

Item No. 31769

CAS Registry No.: 2132411-21-1
Formal Name: 6-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-5,8-quinazolinedione
MF: C₁₉H₁₉N₅O₂
FW: 349.4
Purity: ≥98%
UV/Vis.: λ_{max}: 271 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

QD-394 is supplied as a crystalline solid. A stock solution may be made by dissolving the QD-394 in the solvent of choice, which should be purged with an inert gas. QD-394 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of QD-394 in ethanol and DMF is approximately 1 mg/ml and approximately 5 mg/ml in DMSO.

QD-394 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, QD-394 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. QD-394 has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

QD-394 is an inducer of reactive oxygen species (ROS) production.¹ It induces lipid peroxidation, increases in intracellular accumulation of reactive oxygen species (ROS), and decreases in the reduced glutathione (GSH) to oxidized GSH (GSSG) ratio in MIA PaCa-2 pancreatic cancer cells when used at concentrations ranging from 0.5 to 10 μM. QD-394 is cytotoxic to MIA PaCa-2, PANC-1, and BxPC-3 cancer cells (IC₅₀s = 0.64, 0.34, and 0.9 μM, respectively). QD-394 acts synergistically with napabucasin (Item No. 22255) to reduce colony formation in MIA PaCa-2 cells.

Reference

1. Hu, S., Sechi, M., Singh, P.K., *et al.* A novel redox modulator induces a GPX4-mediated cell death that is dependent on iron and reactive oxygen species. *J. Med. Chem.* **63**(17), 9838-9855 (2020).

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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