

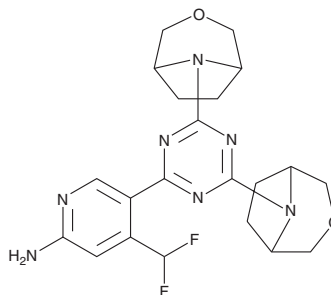
PRODUCT INFORMATION



PQR620

Item No. 26656

CAS Registry No.: 1927857-56-4
Formal Name: 5-[4,6-bis(3-oxa-8-azabicyclo[3.2.1]oct-8-yl)-1,3,5-triazin-2-yl]-4-(difluoromethyl)-2-pyridinamine
MF: C₂₁H₂₅F₂N₇O₂
FW: 445.5
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

PQR620 is supplied as a solid. A stock solution may be made by dissolving the PQR620 in the solvent of choice, which should be purged with an inert gas. PQR620 is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

Description

PQR620 is an inhibitor of mTOR ($K_i = 10.8$ nM).¹ It is selective for mTOR over PI3K p110 α ($K_i = 4.2$ μ M) and a panel of 456 other kinases at 10 μ M. PQR620 has antiproliferative activity against a panel of 66 cancer cell lines (mean IC₅₀ = 919 nM). It induces cell cycle arrest at the G₁ phase in A2058 melanoma and SKOV3 ovarian cancer cells when used at a concentration of 5 μ M. *In vivo*, PQR620 (100 mg/kg per day) decreases the number of seizures per week in a *Tsc1*^{GFAP} conditional knockout mouse model of epilepsy to a similar extent as PQR530 (Item No. 28563).²

References

1. Rageot, D., Bohnacker, T., Melone, A., *et al.* Discovery and preclinical characterization of 5-[4,6-bis(3-oxa-8-azabicyclo[3.2.1]octan-8-yl)-1,3,5-triazin-2-yl]-4-(difluoromethyl)pyridin-2-amine (PQR620), a highly potent and selective mTORC1/2 inhibitor for cancer and neurological disorders. *J. Med. Chem.* **61**(22), 10084-10105 (2018).
2. Theilmann, W., Gericke, B., Schidlitzki, A., *et al.* Novel brain permeant mTORC1/2 inhibitors are as efficacious as rapamycin or everolimus in mouse models of acquired partial epilepsy and tuberous sclerosis complex. *Neuropharmacology* **180**, 108297 (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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