

PRODUCT INFORMATION



YKL-06-061

Item No. 41721

CAS Registry No.: 2172617-15-9
Formal Name: 1-cyclobutyl-3-(2,6-dimethylphenyl)-3,4-dihydro-7-[[2-methoxy-4-(4-methyl-1-piperazinyl)phenyl]amino]-pyrimido[4,5-d]pyrimidin-2(1H)-one

MF: C₃₀H₃₇N₇O₂

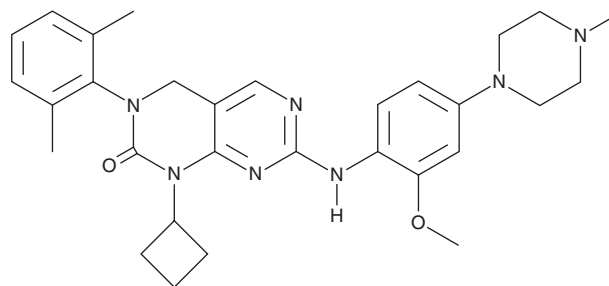
FW: 527.7

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

YKL-06-061 is supplied as a solid. A stock solution may be made by dissolving the YKL-06-061 in the solvent of choice, which should be purged with an inert gas. YKL-06-061 is sparingly soluble (1-10 mg/ml) in chloroform and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

YKL-06-061 is an inhibitor of salt-inducible kinase 1 (SIK1), SIK2, and SIK3 (IC₅₀s = 6.56, 1.77, and 20.5 nM, respectively).¹ It is selective for these SIKs over a panel of 468 additional kinases at 1 μM but does inhibit FRK, CSF1R, p38α, p38β, EphB1, and TNK2 (IC₅₀s = 1.1, 9.66, 10.1, 9.64, 16.4, and 10.5 nM, respectively) and to a lesser extent KIT, Src, BRK, PDGFRβ, and NLK (IC₅₀s = 153, 58.8, 24.1, 103, and 132 nM, respectively). YKL-06-061 (37.5 mM) induces pigmentation in human breast skin explants. *In vivo*, YKL-06-061 (20 mg/kg) decreases seizure severity in a mouse model of epilepsy induced by pentylenetetrazole (PTZ; Item No. 18682).²

References

1. Mujahid, N., Liang, Y., Murakami, R., *et al.* A UV-independent topical small-molecule approach for melanin production in human skin. *Cell Rep.* **19(11)**, 2177-2184 (2017).
2. Peng, L., Li, C., Tang, X., *et al.* Blocking salt-inducible kinases with YKL-06-061 prevents PTZ-induced seizures in mice. *Brain Behav.* **13(12)**, e3305 (2023).

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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