PRODUCT INFORMATION AZ 7371



Item No. 19310

CAS Registry No.: Formal Name:	1494675-86-3 N-(2-hydroxyethyl)-1-[(6-methoxy-5- methyl-4-pyrimidinyl)methyl]-6-methyl-1H- pyrrolo[3,2-b]pyridine-3-carboxamide
MF:	C ₁₈ H ₂₁ N ₅ O ₃ HO N
FW:	355.4 N
Purity:	≥98%
UV/Vis.:	λ_{max} : 215, 297 nm (1) (0)
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

AZ 7371 is supplied as a crystalline solid. A stock solution may be made by dissolving the AZ 7371 in the solvent of choice, which should be purged with an inert gas. AZ 7371 is slightly soluble in methanol.

Description

AZ 7371 is a non-covalent inhibitor of decaprenylphosphoryl-β-D-ribose 2'-epimerase (DprE1; IC_{50} = 10 nM), an enzyme involved in mycobacterial cell wall biogenesis.¹ It inhibits wild-type M. smegmatis DprE1 and DprE1 harboring the drug-resistance mutation C394G (IC₅₀ = 0.01 μ M for both) but not the Y321H mutation (IC₅₀ = >10 μ M).² AZ 7371 is active against wild-type M. tuberculosis DprE1 (MIC = 1.56 μ M) and M. tuberculosis harboring C387S or C387G mutations (MICs = 0.39 and 0.78 μ M, respectively), which confer resistance to the antibiotic BTZ043 (Item No. 22930), but not the Y314H mutation (MIC = >200 μ M). It is selective for these targets over Gram-positive and Gram-negative bacteria but does inhibit phosphodiesterase 6 (PDE6; IC_{50} = 4 μ M).

References

- 1. Chatterji, M., Shandil, R., Manjunatha, M.R., et al. 1,4-azaindole, a potential drug candidate for treatment of tuberculosis. Antimicrob. Agents Chemother. 58(9), 5325-5331 (2014).
- 2. Shirude, P.S., Shandil, R., Sadler, C., et al. Azaindoles: Noncovalent DprE1 inhibitors from scaffold morphing efforts, kill Mycobacterium tuberculosis and are efficacious in vivo. J. Med. Chem. 56(23), 9701-9708 (2013).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

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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