

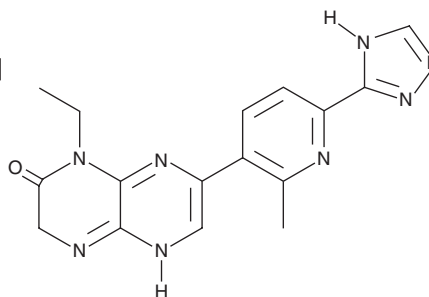
PRODUCT INFORMATION



CC-115

Item No. 19420

CAS Registry No.: 1228013-15-7
Formal Name: 1-ethyl-3,4-dihydro-7-[2-methyl-6-(1H-1,2,4-triazol-5-yl)-3-pyridinyl]-pyrazino[2,3-b]pyrazin-2(1H)-one
MF: C₁₆H₁₆N₈O
FW: 336.4
Purity: ≥95%
UV/Vis.: λ_{max}: 254, 349 nm
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

CC-115 is supplied as a crystalline solid. A stock solution may be made by dissolving the CC-115 in the solvent of choice, which should be purged with an inert gas. CC-115 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CC-115 in these solvents is approximately 10 mg/ml.

CC-115 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CC-115 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CC-115 has a solubility of approximately 0.01 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CC-115 is a dual inhibitor of mammalian target of rapamycin (mTOR) and DNA protein kinase (DNA-PK; IC₅₀s = 0.021 and 0.013 μM, respectively).^{1,2} It is selective for mTOR and DNA-PK over PI3Kα, ATM, and ATR (IC₅₀s = 0.85, >30, and >30 μM, respectively). CC-115 inhibits growth in a panel of 123 cancer cell lines, including breast, head and neck, and lung cancer cells (GI₅₀s = 0.015-1.77 μM), and non-homologous end joining (NHEJ) in CAL-51 and MDA-MB-231 breast, PC3 prostate, and HCT116 colon cancer cells (IC₅₀s = 3.15, 2.16, 2.72, and 6.35 μM, respectively).² It reduces tumor growth in a PC3 prostate cancer mouse xenograft model when administered at doses of 0.25, 0.5, and 1 mg/kg twice per day.¹

References

1. Mortensen, D.S., Perrin-Ninkovic, S.M., Shevlin, G., *et al.* Optimization of a series of triazole containing mammalian target of rapamycin (mTOR) kinase inhibitors and the discovery of CC-115. *J. Med. Chem.* **58(14)**, 5599-5608 (2015).
2. Tsuji, T., Sapinoso, L.M., Tran, T., *et al.* CC-115, a dual inhibitor of mTOR kinase and DNA-PK, blocks DNA damage repair pathways and selectively inhibits ATM-deficient cell growth *in vitro*. *Oncotarget* **8(43)**, 74688-74702 (2017).

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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