

PRODUCT INFORMATION



NX-2127

Item No. 40785

CAS Registry No.: 2416131-46-7

Formal Name: 3-[[4-[1-[[[(3S)-1-[2-(2,6-dioxo-3-piperidinyl)-2,3-dihydro-1,3-dioxo-1H-isoindol-5-yl]-3-pyrrolidinyl)methyl]-4-piperidinyl]phenyl]amino]-5-(1-piperidinyl)-2-pyrazinecarboxamide

MF: C₃₉H₄₅N₉O₅

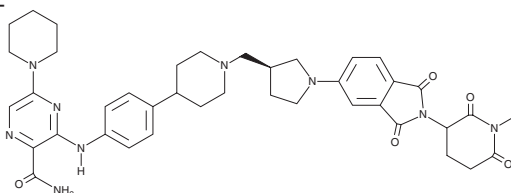
FW: 719.8

Purity: ≥95%

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

NX-2127 is supplied as a solid. A stock solution may be made by dissolving the NX-2127 in the solvent of choice, which should be purged with an inert gas. NX-2127 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

NX-2127 is a proteolysis-targeting chimera (PROTAC) containing a binding moiety for Bruton's tyrosine kinase (BTK) linked to a cereblon (CRBN) binding moiety.¹ It induces degradation of wild-type BTK (DC₅₀ = 1.9 nM) and BTK mutants containing drug resistance-conferring mutations, including BTK^{C481S}, BTK^{V416L}, BTK^{T474I}, and BTK^{L528W} in TMD8 diffuse large B cell lymphoma (DLBCL) cells (DC₅₀s = 9.7, 4.2, 2.4, and 1.9 nM, respectively).² NX-2127 also degrades the lymphocyte transcription factors Ikaros family zinc finger protein 1 (IKZF1) and IKZF3 (DC₅₀s = 57 and 36 nM, respectively) and induces T cell activation in primary human T cells stimulated by anti-CD3 and anti-CD28 antibodies.¹ It reduces BTK levels in circulating mouse B cells to 12% of baseline when administered at a dose of 30 mg/kg. NX-2127 (10, 30, and 90 mg/kg per day) induces intratumoral BTK, IKZF1, and IKZF3 degradation in a TMD8 mouse xenograft model. It also reduces tumor growth in mouse xenograft models using TMD8 cells expressing wild-type BTK or BTK^{C481S}.

References

1. Robbins, D.W., Noviski, M.A., Tan, Y.S., *et al.* Discovery and preclinical pharmacology of NX-2127, an orally bioavailable degrader of Bruton's tyrosine kinase with immunomodulatory activity for the treatment of patients with B cell malignancies. *J. Med. Chem.* **67**(4), 2321-2336 (2024).
2. Montoya, S., Bourcier, J., Noviski, M., *et al.* Kinase-impaired BTK mutations are susceptible to clinical-stage BTK and IKZF1/3 degrader NX-2127. *Science* **383**(6682), eadi5798 (2024).

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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