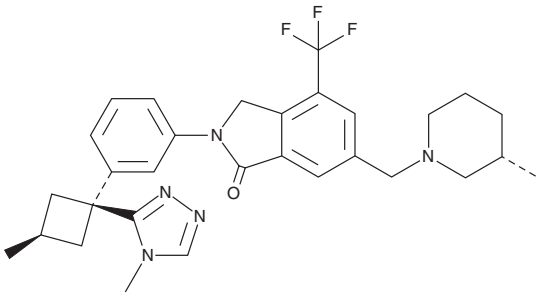
PRODUCT INFORMATION

NX-1607

Item No. 45222

CAS Registry No.:	2573775-59-2
Formal Name:	2,3-dihydro-2-[3-[*cis*-3-methyl-1-(4-methyl-4H-1,2,4-triazol-3-yl) cyclobutyl]phenyl]-6-[[(3S)-3-methyl-1-piperidinyl]methyl]-4-(trifluoromethyl)-1H-isoindol-1-one
Synonym:	Cbl-b-IN-3
MF:	$C_{30}H_{34}F_3N_5O$
FW:	537.6
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-1607 is supplied as a solid. A stock solution may be made by dissolving the NX-1607 in the solvent of choice, which should be purged with an inert gas. NX-1607 is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

NX-1607 is an inhibitor of casitas B-lineage lymphoma proto-oncogene b (Cbl-b; IC_{50} = 3.4 nM), a RING-type E3 ubiquitin ligase that negatively regulates T cell function.[1] It increases IL-2 secretion in primary human T cells (EC_{50} = 180.6 nM). Application of NX-1607 to anti-CD19 chimeric antigen receptor T (CAR-T) cells generated from patients with diffuse large B cell lymphoma (DLBCL) increases the number of CAR-T cells formed during expansion.[2] NX-1607 also increases the production of IFN-γ, TNF-α, IL-2, and granzyme B in the same CAR-T cells and enhances the cytotoxicity of the CAR-T cells in Raji, Daudi, and SU-DHL-4 cells. It enhances the antitumoral efficacy of anti-CD19 CAR-T cells in a Raji B cell lymphoma mouse xenograft model. NX-1607 (5 mg/kg) also reduces alanine transaminase (ALT) and aspartate aminotransferase (AST), markers of liver injury, and hepatic fibrosis in methionine- and choline-deficient (MCD) diet, carbon tetrachloride (CCl_4), and bile duct ligation (BDL) models of liver fibrosis.[3]

References

1. Meng, F., Cao, Z., Liu, J., *et al.* Discovery and biological evaluation of novel, potent, and orally available CBLB inhibitors. *J. Med. Chem.* **68(22)**, 24502-24518 (2025).
2. Wang, H., Li, F., Feng, Y., *et al.* Cbl-b inhibition improves manufacturing efficiency and antitumoral efficacy of anti-CD19 CAR-T cells. *Int. Immunopharmacol.* **147:113971**, (2025).
3. Lu, K., Xu, Y., He, L., *et al.* Revisiting the role of CBL in liver fibrosis: Unveiling the antifibrotic potential of CBLB inhibitor NX-1607. *J. Hepatol.* **83(3)**, e175-e177 (2025).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM