PRODUCT INFORMATION



N6F11

Item No. 39919

CAS Registry No.: 851398-76-0

Formal Name: 2-(chloromethyl)-6-(4-chlorophenyl)-

thieno[3,2-d]pyrimidin-4(3H)-one

MF: $C_{13}H_{10}CI_{2}N_{2}OS$

FW: 313.2 **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

N6F11 is supplied as a solid. A stock solution may be made by dissolving the N6F11 in the solvent of choice, which should be purged with an inert gas. N6F11 is soluble in the organic solvent chloroform. N6F11 is slightly soluble in acetonitrile.

Description

N6F11 is an inducer of ferroptosis. It increases the thermal stability of the ubiquitin ligase TRIM25 in a cellular thermal shift assay (CETSA) using PANC-1 pancreatic cancer cells when used at a concentration of 10 μM and enhances TRIM25-dependent ubiquitination of glutathione peroxidase 4 (GPX4) in a cell-free assay at 0.1 and 1 µM. N6F11 (5 µM) induces lipid peroxidation and ferroptosis, as well as degradation of GPX4, an effect that can be reversed by the proteasome inhibitors carfilzomib (Item No. 17554) or bortezomib (Item No. 10008822), in PANC-1 cells. It selectively induces cytotoxicity in HT-1080, PANC-1, MiaPaCa-2, and Calu-1 cancer cells over neutrophils, dendritic cells, natural killer (NK) cells, and CD8⁺ T cells. N6F11 (10 mg/kg) decreases tumor volume in a KPC murine pancreatic ductal adenocarcinoma (PDAC) model, which can be inhibited by the ferroptosis inhibitor liproxstatin-1 (Item No. 17730) or an anti-CD8 antibody.

Reference

1. Li, J., Liu, J., Zhou, Z., et al. Tumor-specific GPX4 degradation enhances ferroptosis-initiated antitumor immune response in mouse models of pancreatic cancer. Sci. Transl. Med. 15(720), eadg3049 (2023).

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

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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