

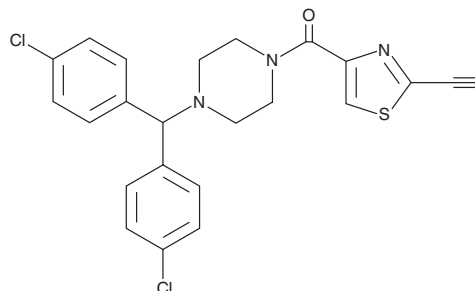
# PRODUCT INFORMATION



## BCP-T.A.

Item No. 37659

**CAS Registry No.:** 2786829-70-5  
**Formal Name:** [4-[bis(4-chlorophenyl)methyl]-1-piperazinyl]  
(2-ethynyl-4-thiazolyl)-methanone  
**MF:** C<sub>23</sub>H<sub>19</sub>Cl<sub>2</sub>N<sub>3</sub>OS  
**FW:** 456.4  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

BCP-T.A. is supplied as a solid. A stock solution may be made by dissolving the BCP-T.A. in the solvent of choice, which should be purged with an inert gas. BCP-T.A. is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of BCP-T.A. in these solvents is approximately 12, 10, and 3 mg/ml, respectively.

### Description

BCP-T.A. is a ferroptosis inducer.<sup>1</sup> It induces ferroptosis in NCI H522 non-small cell lung cancer (NSCLC) cells (IC<sub>50</sub> = 17 nM), an effect that can be blocked by the ferroptosis inhibitor liproxstatin-1 (Item No. 17730). BCP-T.A. binds to glutathione peroxidase (GPX4) and increases the accumulation of lipid peroxides in NCI H522 cells when used at a concentration of 0.5 μM. It is cytotoxic to WI38 human lung fibroblasts and mouse embryonic fibroblasts (MEFs; IC<sub>50</sub>s = 22 and 10 nM, respectively), as well as NCI H522, HT-1080 fibrosarcoma, MDA-MB-468 and MDA-MB-231 breast, and HeLa cervical cancer cells (IC<sub>50</sub>s = 17, 19, 84, 21, and 242 nM, respectively).

### Reference

1. Karaj, E., Sindi, S.H., Kuganesan, N., *et al.* Tunable cysteine-targeting electrophilic heteroaromatic warheads induce ferroptosis. *J. Med. Chem.* **65**(17), 11788-11817 (2022).

#### 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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#### 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](http://WWW.CAYMANCHEM.COM)