

**Product Name:** ML 210

**Catalog No.:** 6429

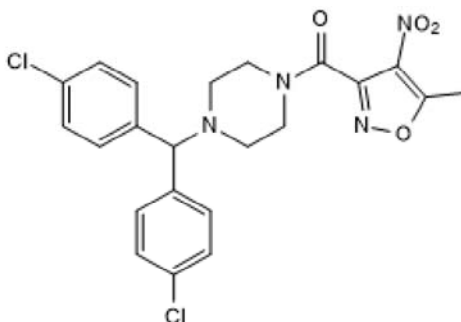
**Batch No.:** 1

CAS Number: 1360705-96-9

IUPAC Name: [4-[Bis(4-chlorophenyl)methyl]-1-piperazinyl](5-methyl-4-nitro-3-isoxazolyl)methanone

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>22</sub>H<sub>20</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>4</sub>  
**Batch Molecular Weight:** 475.32  
**Physical Appearance:** Beige solid  
**Solubility:** DMSO to 50 mM  
ethanol to 10 mM with gentle warming  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.72 (Ethyl acetate:Petroleum ether [3:1])  
**HPLC:** Shows 99.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	55.59	4.24	11.79
Found	55.49	4.23	11.83

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Glutathione peroxidase (GPX4) inhibitor. Kills mutant RAS-expressing cell lines (IC<sub>50</sub> values are 71 and 272 nM for HRAS G12v mutant expressing cell lines BJeLR and BJeH-LT, respectively). Exhibits 4-fold selectivity for HRAS mutant-expressing cell lines. Induces ferroptosis in tumor initiation "persister" cells and drug-resistant tumor cells.

**Physical and Chemical Properties:**

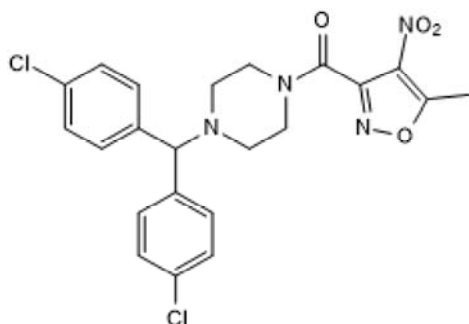
Batch Molecular Formula: C<sub>22</sub>H<sub>20</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>4</sub>

Batch Molecular Weight: 475.32

Physical Appearance: Beige solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 50 mM

ethanol to 10 mM with gentle warming

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Hangauer et al** (2017) Drug-tolerant persister cancer cells are vulnerable to GPX4 inhibition. *Nature* **551** 247. PMID: 29088702.

**Yang et al** (2014) Regulation of ferroptotic cancer cell death by GPX4. *Cell* **156** 317. PMID: 24439385.

**Weiwler et al** (2012) Development of small-molecule probes that selectively kill cells induced to express mutant RAS. *Bioorg.Med.Chem.Lett.* **22** 1822. PMID: 22297109.

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