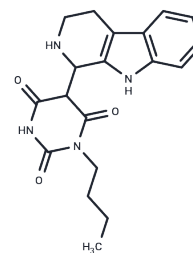


## MEL23

### Chemical Properties

CAS No. :	642072-49-9
Formula:	C <sub>19</sub> H <sub>22</sub> N <sub>4</sub> O <sub>3</sub>
Molecular Weight:	354.403
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



### Biological Description

Description	MEL23 is an MDM2E3 ligase inhibitor that prevents the E3 ligase activity of the MDM2-MDMX complex. It inhibits the ubiquitination of Mdm2 and p53 in cells, reducing the viability of wild-type p53 cells. Additionally, MEL23 stabilizes MDM2 through a mechanism independent of p53 transcription.
Targets(IC50)	Ligands for E3 Ligase
In vitro	MEL23 enhances the luminescence of Mdm2 (wt)-luciferase cells with an EC <sub>50</sub> of 2.7 µg/mL [1]. MEL23 (3.16-100 µM; 48 hours) induces p53-dependent cell death [1]. At concentrations of 2.5-5 µg/mL for 48 hours, MEL23 increases the sub-G1 cell population and causes a slight G2 cell cycle arrest in HT-1080 cells [1]. After 6 hours at 5 µg/mL, it raises the levels of Mdm2, p53, and MdmX, thereby activating p53 [1]. The transcription of p53 target genes such as Mdm2, p21, puma, and bax is elevated when exposed to MEL23 at 5 µg/mL for 24-48 hours [1]. In parental HT-1080 cells, MEL23 inhibits Erastin-induced cell death and significantly reduces the extent of ferroptosis [2].

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8217 mL	14.1084 mL	28.2167 mL
5 mM	0.5643 mL	2.8217 mL	5.6433 mL
10 mM	0.2822 mL	1.4108 mL	2.8217 mL
50 mM	0.0564 mL	0.2822 mL	0.5643 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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