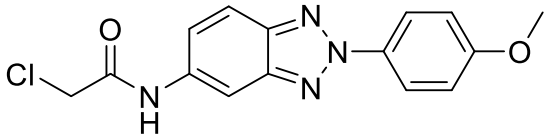
Product data sheet

MedKoo Cat#: 124082 Name: HG-106 CAS#: 928712-10-1 Chemical Formula: $C_{15}H_{13}ClN_4O_2$ Exact Mass: 316.0727 Molecular Weight: 316.75	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
HG-106 is a potent SLC7A11 inhibitor. HG-106 markedly decreased cystine uptake and intracellular glutathione biosynthesis. Furthermore, HG106 exhibited selective cytotoxicity toward KRAS-mutant cells by increasing oxidative stress- and ER stress-mediated cell apoptosis. Of note, treatment of KRAS-mutant LUAD with HG-106 in several preclinical lung cancer mouse models led to marked tumor suppression and prolonged survival.

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	125	394.65

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	**1 mg**	**5 mg**	**10 mg**
1 mM	3.16 mL	15.79 mL	31.57 mL
5 mM	0.63 mL	3.16 mL	6.31 mL
10 mM	0.32 mL	1.58 mL	3.16 mL
50 mM	0.06 mL	0.32 mL	0.63 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

To be determined

In vivo study

1. Hu K, Li K, Lv J, Feng J, Chen J, Wu H, Cheng F, Jiang W, Wang J, Pei H, Chiao PJ, Cai Z, Chen Y, Liu M, Pang X. Suppression of the SLC7A11/glutathione axis causes synthetic lethality in KRAS-mutant lung adenocarcinoma. J Clin Invest. 2020 Apr 1;130(4):1752-1766. doi: 10.1172/JCI124049. PMID: 31874110; PMCID: PMC7108883.

7. Bioactivity
Biological target:

HG-106 is a potent SLC7A11 inhibitor.

In vitro activity

To be determined

Product data sheet

In vivo activity

Treatment of KRAS-mutant lung adenocarcinoma (LUAD) with HG-106 in several preclinical lung cancer mouse models led to marked tumor suppression and prolonged survival. HG-106 markedly decreased cystine uptake and intracellular glutathione biosynthesis. HG-106 exhibited selective cytotoxicity toward KRAS-mutant cells by increasing oxidative stress- and ER stress-mediated cell apoptosis.

Reference: J Clin Invest. 2020 Apr 1;130(4):1752-1766. https://pubmed.ncbi.nlm.nih.gov/31874110/

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.