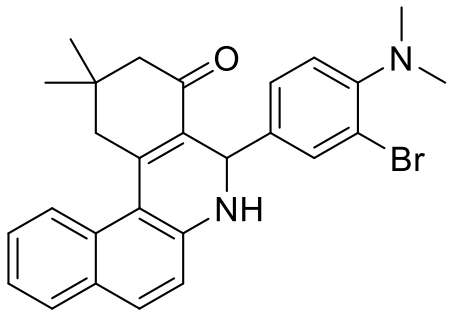
Product data sheet

MedKoo Cat#: 562397 Name: GLS-IN-968 CAS: 311795-38-7 Chemical Formula: $C_{27}H_{27}BrN_2O$ Exact Mass: 474.1307 Molecular Weight: 475.43	
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:
GLS-IN-968 is an allosteric inhibitor of glutaminase (GLS). It acts by blocking Rho-GTPase-dependent transformation of fibroblasts and suppressing breast cancer cell growth and invasive activity in vitro.

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
DMF	16.0	33.65
DMF:PBS (pH 7.2) (1:2)	0.3	0.63
DMSO	24.88	52.33
Ethanol	0.5	1.05

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.10 mL	10.52 mL	21.03 mL
5 mM	0.42 mL	2.10 mL	4.21 mL
10 mM	0.21 mL	1.05 mL	2.10 mL
50 mM	0.04 mL	0.21 mL	0.42 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

1. Effenberger M, Bommert KS, Kunz V, Kruk J, Leich E, Rudelius M, Bargou R, Bommert K. Glutaminase inhibition in multiple myeloma induces apoptosis via MYC degradation. Oncotarget. 2017 Aug 24;8(49):85858-85867. doi: 10.18632/oncotarget.20691. PMID: 29156762; PMCID: PMC5689652.
2. Han T, Guo M, Zhang T, Gan M, Xie C, Wang JB. A novel glutaminase inhibitor-968 inhibits the migration and proliferation of non-small cell lung cancer cells by targeting EGFR/ERK signaling pathway. Oncotarget. 2017 Apr 25;8(17):28063-28073. doi: 10.18632/oncotarget.14188. PMID: 28039459; PMCID: PMC5438631.

In vivo study

1. Guo H, Li W, Pan G, Wang C, Li D, Liu N, Sheng X, Yuan L. The Glutaminase Inhibitor Compound 968 Exhibits Potent in vitro and in vivo Anti-tumor Effects in Endometrial Cancer. Anticancer Agents Med Chem. 2022 May 13. doi: 10.2174/1871520622666220513163341. Epub ahead of print. PMID: 35570522.

7. Bioactivity

Product data sheet

Biological target:

Glutaminase C-IN-1 (Compound 968) is an allosteric inhibitor of Glutaminase C that inhibits cancer cell growth without affecting their normal cellular counterparts.

In vitro activity

Treatment of primary MM cells with 968 (glutaminase C-IN-1) also induced apoptosis (Figure 1e). In 13 primary patient samples, there was on average a 62% decrease in viable cells in the presence of 10 μM 968 (p= 0.01 to DMSO treatment on non-normalized data). Treatment of five PBMC samples with 968 decreased the percentage of viable cells only to 94% compared to the DMSO control.

Reference: Oncotarget. 2017 Aug 24;8(49):85858-85867. https://pubmed.ncbi.nlm.nih.gov/29156762/

In vivo activity

In xenograft mouse models of endometrial cancer, compound 968 significantly suppressed tumor growth.

Reference: Anticancer Agents Med Chem. 2022 May 13. https://pubmed.ncbi.nlm.nih.gov/35570522/

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.