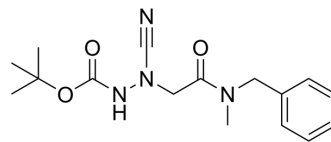


## Gü2602

<b>Cat. No.:</b>	HY-144813
<b>CAS No.:</b>	1627094-88-5
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>22</sub> N <sub>4</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	318.37
<b>Target:</b>	Cathepsin
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 66.67 mg/mL (209.41 mM; Need ultrasonic)																					
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent</th> <th rowspan="2">Mass</th> <th colspan="3">Concentration</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Preparing Stock Solutions</td> <td>1 mM</td> <td>3.1410 mL</td> <td>15.7050 mL</td> <td>31.4100 mL</td> </tr> <tr> <td>5 mM</td> <td>0.6282 mL</td> <td>3.1410 mL</td> <td>6.2820 mL</td> </tr> <tr> <td>10 mM</td> <td>0.3141 mL</td> <td>1.5705 mL</td> <td>3.1410 mL</td> </tr> </tbody> </table>	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	Preparing Stock Solutions	1 mM	3.1410 mL	15.7050 mL	31.4100 mL	5 mM	0.6282 mL	3.1410 mL	6.2820 mL	10 mM	0.3141 mL	1.5705 mL	3.1410 mL
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	Please refer to the solubility information to select the appropriate solvent.																					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.85 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (7.85 mM); Clear solution</li> </ol>																					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Gü2602 is a potent, reversible cathepsin K (CatK) inhibitor with a K <sub>i</sub> of 0.013 nM for mature CatK (mCatK). Gü2602 suppresses the autocatalytic activation of the cathepsin K zymogen <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	cathepsin K

### REFERENCES

[1]. Benýšek J, et al. Highly potent inhibitors of cathepsin K with a differently positioned cyanohydrazone warhead: structural analysis of binding mode to mature and zymogen-like enzymes. *J Enzyme Inhib Med Chem.* 2022 Dec;37(1):515-526.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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