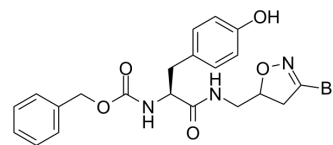


## KCC009

Cat. No.:	HY-123290
CAS No.:	744198-19-4
Molecular Formula:	C <sub>21</sub> H <sub>22</sub> BrN <sub>3</sub> O <sub>5</sub>
Molecular Weight:	476.32
Target:	Glutaminase
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (524.86 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.0994 mL	10.4971 mL	20.9943 mL
				5 mM	0.4199 mL	2.0994 mL	4.1989 mL
				10 mM	0.2099 mL	1.0497 mL	2.0994 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.37 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.37 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.37 mM); Clear solution						

### BIOLOGICAL ACTIVITY

Description	KCC009, a transglutaminase 2 (TG2) inhibitor, induces p53-independent radiosensitization <sup>[1][2]</sup> .
In Vitro	The inhibition rates were 15.33±1.46 (%) for H1299/WT-p53 cells, and 14.31±1.90 (%) for H1299/M175H-p53 cells when cells were treated with KCC009 at concentration of 3.91 μM <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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[1]. Sheng Huaying, et al. Transglutaminase 2 Inhibitor KCC009 Induces p53-Independent Radiosensitization in Lung Adenocarcinoma Cells. Med Sci Monit. 2016 Dec 21;22:5041-5048.

[2]. L Yuan, et al. Transglutaminase 2 inhibitor, KCC009, disrupts fibronectin assembly in the extracellular matrix and sensitizes orthotopic glioblastomas to chemotherapy. Oncogene

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

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