

MB710

## Chemical Properties

CAS No. : 2230044-57-0

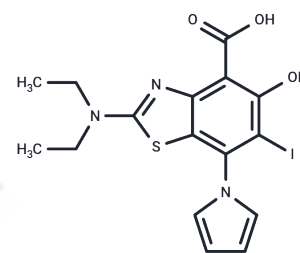
Formula: C<sub>16</sub>H<sub>16</sub>IN<sub>3</sub>O<sub>3</sub>S

Molecular Weight: 457.29

Keep away from moisture

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	MB710 is an amino benzothiazole derivative that binds tightly to the Y220C pocket and stabilizes p53-Y220C in vitro. It exhibits anticancer activity and can be used in cancer research.
Targets(IC50)	Mdm2,p53,MDM-2/p53
In vitro	<p>MB710 (0-200 <math>\mu</math>M; 72 hours) shows relatively low toxicity against all tested cell lines at concentrations up to 60 <math>\mu</math>M, while showing initial selective viability reduction at higher concentrations [1].</p> <p>MB710 (72 hours) treats cancer cell lines NUGC3, NUGC4, WI38 and SW1088, with IC 50 s of 90, 120, &gt;120, &gt;120 <math>\mu</math>M, respectively [1].</p> <p>MB710 (0-120 <math>\mu</math>M; 72 hours; HUH-7 cells) shows stronger cytotoxic effects in presence of p53-Y220C [1].</p> <p>Cell Viability Assay Cell Line: NUGC3 (mutant p53 Y220C), HUH-7 (mutant p53 Y220C), NUGC4 (p53 WT), HUH-6 cells (p53 WT) Concentration: 0-200 <math>\mu</math>M Incubation Time: 72 hours Result: Showed relatively low toxicity against all cell lines tested at concentrations up to 60 <math>\mu</math>M. NUGC3 was the most sensitive cell line.[1]</p>

## Solubility Information

Solubility	DMSO: 80 mg/mL (174.94 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.1868 mL	10.934 mL	21.868 mL
5 mM	0.4374 mL	2.1868 mL	4.3736 mL
10 mM	0.2187 mL	1.0934 mL	2.1868 mL
50 mM	0.0437 mL	0.2187 mL	0.4374 mL

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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.

### Reference

Baud MGJ, et al. Aminobenzothiazole derivatives stabilize the thermolabile p53 cancer mutant Y220C and show anticancer activity in p53-Y220C cell lines. Eur J Med Chem. 2018 May 25;152:101-114.

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