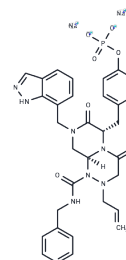


YB-0158

## Chemical Properties

CAS No. : 1144043-83-3  
 Formula: C<sub>32</sub>H<sub>32</sub>N<sub>7</sub>Na<sub>2</sub>O<sub>7</sub>P  
 Molecular Weight: 703.59  
 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	YB-0158 (Wnt pathway inhibitor 2) is a potent peptidomimetic compound that targets colorectal cancer stem cells (CSCs) by disrupting the interaction between Sam68 and Src proteins. As a reverse-turn agent, it induces apoptosis in CRC cells and exhibits strong anti-cancer activity.
Targets(IC50)	Apoptosis,Others,Wnt/beta-catenin
In vitro	YB-0158, at concentrations of 0.2 μM and 0.5 μM over a 48-hour period, significantly enhances apoptosis in CRC cells, as evidenced by activated Caspase-3/7 detection assays[1]. Additionally, a 0.3 μM concentration of YB-0158 markedly reduces CBP recruitment at the LGR5 and MYC promoter regions of Wnt/beta-Catenin target genes in HT29 cells, compared to a DMSO control[1].
In vivo	YB-0158 exhibits an effective concentration (EC 50) of 1.64 μM in MC38 cells cultured in vitro. In vivo experiments utilizing C57BL/6 mice with MC38 cell-derived tumors demonstrate that YB-0158 administered intraperitoneally (IP) at a dose of 100 mg/kg does not significantly alter primary tumor size compared to saline-treated controls[2].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4213 mL	7.1064 mL	14.2128 mL
5 mM	0.2843 mL	1.4213 mL	2.8426 mL
10 mM	0.1421 mL	0.7106 mL	1.4213 mL
50 mM	0.0284 mL	0.1421 mL	0.2843 mL

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

Masibag AN, Bergin CJ, Haebe JR, et al. Pharmacological targeting of Sam68 functions in colorectal cancer stem cells. *iScience*. 2021;24(12):103442.

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