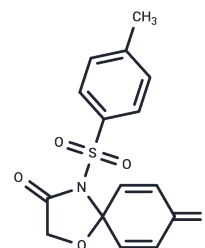


## MMP2-IN-1

## Chemical Properties

CAS No. :	2764598-01-6
Formula:	C <sub>15</sub> H <sub>13</sub> N <sub>2</sub> O <sub>5</sub>
Molecular Weight:	319.33
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	MMP2-IN-1 shows significant antiproliferative activity in certain cancer cells through arresting the cell cycle and inducing apoptosis. MMP2-IN-1 is a moderate potent inhibitor of MMP2 (IC <sub>50</sub> = 6.8 μM)[1].
Targets(IC <sub>50</sub> )	Apoptosis, MMP, Others
In vitro	MMP2-IN-1 (compound 4a) exhibited potent anticancer activity with IC <sub>50</sub> values of 0.07 μM, 0.11 μM, and 0.18 μM for MDA-MB-231, A549, and HeLa cells, respectively, over 74 hours. It showed minimal effectiveness in Hep 5G cells at concentrations above 10 μM. At 10 μM, it induced S phase arrest in MDA-MB-231 cells after 24 hours and increased early-stage apoptosis from 4.66% to 10.9% in a dose-dependent manner.
In vivo	MMP2-IN-1, when administered intraperitoneally (IP) in single doses of 100 mg/kg, 150 mg/kg, 200 mg/kg, and 250 mg/kg to Kunming mice (n=10, evenly split between male and female), exhibited increasing mortality rates of 0%, 30%, 50%, and 60% respectively [1]. Conversely, a daily IP administration of 10 mg/kg MMP2-IN-1 over 14 days significantly inhibited tumor growth in an orthotopic 4T1 tumor-bearing mouse model, showcasing its potential in treating metastatic 4T1 murine breast cancer [1].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1316 mL	15.6578 mL	31.3156 mL
5 mM	0.6263 mL	3.1316 mL	6.2631 mL
10 mM	0.3132 mL	1.5658 mL	3.1316 mL
50 mM	0.0626 mL	0.3132 mL	0.6263 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481