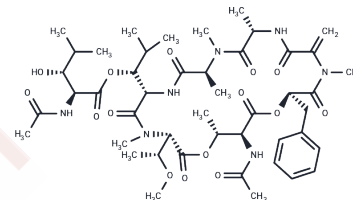


YM-254890

## Chemical Properties

CAS No. : 568580-02-9  
 Formula: C46H69N7O15  
 Molecular Weight: 960.08  
 Storage: Store at low temperature  
 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	YM-254890, a macrocyclohexapeptide isolated from <i>Chromobacterium</i> sp, is a selective and potent inhibitor of Gαq/11 protein, inhibits ADP-induced platelet aggregation and inhibits G protein signaling.
Targets(IC50)	P2Y Receptor
In vitro	<b>METHODS:</b> The effects of YM-254890 on P2Y1 and P2Y12 signaling pathways were examined using C6-15 cells stably expressing human P2Y1 or P2Y12 receptors. <b>RESULTS:</b> 2MeSADP stimulation of P2Y1-C6-15 cells resulted in increased intracellular calcium mobilization. In this assay, YM-254890 inhibited the increase in [Ca <sup>2+</sup> ] <sub>i</sub> (IC <sub>50</sub> : 0.031 μM). However, 40 μM of YM-254890 did not affect the 2MeSADP-induced inhibition of forskolin-stimulated adenylate cyclase activity in P2Y12-C6-15 cells [1].

## Solubility Information

Solubility	DMSO: 30 mg/mL (31.25 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1.5 mg/mL (1.56 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.0416 mL	5.2079 mL	10.4158 mL
5 mM	0.2083 mL	1.0416 mL	2.0832 mL
10 mM	0.1042 mL	0.5208 mL	1.0416 mL
50 mM	0.0208 mL	0.1042 mL	0.2083 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

Taniguchi M, et al. YM-254890, a novel platelet aggregation inhibitor produced by *Chromobacterium* sp. QS3666. *J Antibiot (Tokyo)*. 2003 Apr;56(4):358-63.

Zhang H, et al. Structure-activity relationship and conformational studies of the natural product cyclic depsipeptides YM-254890 and FR900359. *Eur J Med Chem*. 2018 Aug 5;156:847-860.

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

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