## Data Sheet (Cat.No.T17273)



YM-254890

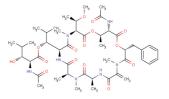
### **Chemical Properties**

CAS No.: 568580-02-9 Formula: C46H69N7O15

Molecular Weight: 960.08

Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

Description	YM-254890 inhibits platelet aggregation induced by ADP by blocking the P2Y1 signal transduction pathway (IC50: below 0.6 $\mu$ M). YM-254890 is a selective G $\alpha$ q/11 protein inhibitor. YM-254890 displays no inhibition of other G protein subtypes.
Targets(IC <sub>50</sub> )	Gαq/11 protein: None
In vitro	The effect of YM-254890 on the P2Y1 and P2Y12 signal transduction pathways using C6-15 cells stably expressing the human P2Y1 or P2Y12 receptors is examined. Stimulation of P2Y1-C6-15 cells by 2MeSADP leads to increases in intracellular calcium mobilization. In this assay, YM-254890 inhibits the increase in [Ca2+]i (IC50: 0.031 µM). However, 2MeSADP-induced inhibition of forskolin-stimulated adenylyl cyclase activity in P2Y12-C6-15 cells is unaffected by YM-254890 at 40 µM [1].

# **Solubility Information**

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	1.042 mL	5.208 mL	10.416 mL
5 mM	0.208 mL	1.042 mL	2.083 mL
10 mM	0.104 mL	0.521 mL	1.042 mL
50 mM	0.021 mL	0.104 mL	0.208 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

- 1. 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.
- 2. 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.

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