1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{46}\text{H}_{69}\text{N}_{7}\text{O}_{15} \)
Batch Molecular Weight: 960.09
Physical Appearance: White solid
Solubility: DMSO to 10 mM
Storage: Store at -20°C

2. ANALYTICAL DATA

HPLC: Shows 97.1% purity
Product Information

Product Name: YM 254890
Catalog No.: 7352
Batch No.: 4

CAS Number: 568580-02-9
IUPAC Name: \((R)-1-((3S,6S,9S,12S,18R,21S,22R)-21\text{-acetamido-18-benzyl-3-((R)-1\text{-methoxyethyl})-4,9,10,12,16,22-hexamethyl-15-methylene-2,5,8,11,14,17,20-heptaaxo-1,19-dioxa-4,7,10,13,16-pentaazacyclodocosan-6-yl)-2\text{-methylpropyl}}(2S,3R)-2\text{-acetamido-3-hydroxy-4-methylpentanoate}\)

Description:
YM 254890 is a G-protein inhibitor. Potently inhibits G_{q/11} heterotrimeric G protein signaling. Inhibits ATP/UTP-induced Ca^{2+} increase in HCAE cells expressing P2Y_{2} receptor (IC_{50} = 50 nM); carbachol-induced production of IP_{3} in CHO cells expressing M_{1} receptor (IC_{50} = 95 nM); and ADP-induced Ca^{2+} increase in platelets, in vitro (IC_{50} = 2 μM). Also inhibits G_{q}-induced cAMP elevation and G protein-coupled MAPK/ERK signaling.

Physical and Chemical Properties:
Batch Molecular Formula: C_{46}H_{60}N_{7}O_{15}
Batch Molecular Weight: 960.09
Physical Appearance: White solid
Minimum Purity: ≥95%

Storage: Store at -20°C

Solubility & Usage Info:
DMSO to 10 mM
This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).
Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References: