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DATASHEET

YM-254890

Product overview

Name	YM-254890
Cat No	HB6283
Biological action	Inhibitor
Purity	>98%
Description	Potent $G_{q/11}$ signaling inhibitor. Reported as G_q. G-protein inhibitor and broad-spectrum inhibitor for G_q- and G_s-proteins.

Biological Data

Biological description	G_q. G-protein inhibitor which potently inhibits Gq/11 heterotrimeric G protein signaling by blocking GDP exchange of GTP on the α- subunit of the G_q complex. Recently reported to act as a broad-spectrum inhibitor for Gq- and Gs-proteins and exhibits a biased inhibition on Gi/o signaling, without affecting non-GPCR-mediated cellular signaling (Peng et al 2021). Shown to attenuate ADP-, collagen-, TRAP-, arachidonic acid- and U46619-induced platelet aggregation to show antithrombotic effects.

Solubility & Handling

Storage instructions	-20°C
Solubility overview	Soluble in DMSO (10mg/ml)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

Chemical Data

Chemical name	[(1*R*)-1-[(3*S*,6*S*,9*S*,12*S*,18*R*,21*S*,22*R*)-21-acetamido-18-benzyl-3-[(1*R*)-1-methoxyethyl]-4,9,10,12,16,22-hexamethyl-15-methylidene-2,5,8,11,14,17,20-heptaoxo-1,19-dioxa-4,7,10,13,16-pentazacyclodocos-6-yl]-2-methylpropyl] (2*S*,3*R*)-2-acetamido-3-hydroxy-4-methylpentanoate
Molecular Weight	960.1
Molecular Formula	$C_{46}H_{69}N_7O_{15}$
CAS Number	568580-02-9
PubChem identifier	9919454
SMILES	C[C@@H]1[C@@H](C(=O)O[C@@H](C(=O)N(C(=C)C(=O)N[C@H](C(=O)N([C@H](C(=O)N[C@H](C(=O)N([C@H](C(=O)O1)[C@@H](C)OC)C)[C@@H](C(C)C)OC(=O)[C@H]([C@@H](C(C)C)O)NC(=O)C)C)C)C)C)CC2=CC=CC=C2)NC(=O)C
Source	Chromobacterium sp.
InChi	InChI=1S/C46H69N7O15/c1-22(2)37(56)34(49-30(11)55)45(63)68-38(23(3)4)35-43(61)53(14)36(28

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InChiKey	(9)65-15)46(64)66-27(8)33(48-29(10)54)44(62)67-32(21-31-19-17-16-18-20-31)42(60)52(13)25(6)39(57)47-24(5)41(59)51(12)26(7)40(58)50-35/h16-20,22-24,26-28,32-38,56H,6,2 QVYLWCAYZGFGNF-WBWCVGBTSA-N

References

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Uemura et al (2006) Eur J Pharmacol. 536(1-2)
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