

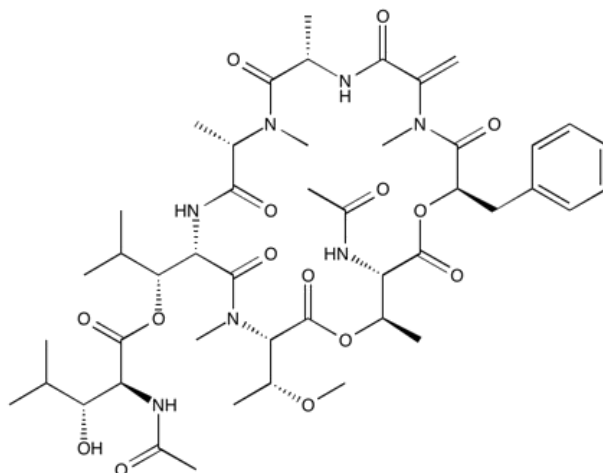
**Catalog # 10-1590**

**YM-254890**

CAS# 568580-02-9

Cyclic depsipeptide isolated from *Chromobacterium sp.*

Lot # X106235



YM-254890 is a novel  $G_{\alpha_q/11}$  inhibitor.<sup>1</sup> U46619-induced platelet aggregation is inhibited but phorbol ester- or ionophore-induced aggregation is not.<sup>2</sup> ( $IC_{50} = 0.1-0.2 \mu M$ ).<sup>1</sup> It blocks *Pasteurella multocida* toxin-mediated activation of  $G_{\alpha_q}$ .<sup>3</sup> A highly useful new tool for studying  $G_{\alpha_q/11}$ -coupled receptor signaling and resulting cellular events.<sup>4</sup>

- 1) Takasaki *et al.* (2004), *A novel Galphaq/11-selective inhibitor*; J. Biol. Chem., **279** 47438
- 2) Uemura *et al.* (2006), *Biological properties of a specific Galpha q/11 inhibitor, YM-254890, on platelet functions and thrombus formation under high shear stress*; Br. J. Pharmacol., **148** 61
- 3) Orth *et al.* (2005), *Pasteurella multocida toxin-induced activation of RhoA is mediated via two families of G(alpha) proteins, G(alpha)q and G(alpha)12/13*; J. Biol. Chem., **280** 36701
- 4) Mizuno and Itoh (2009), *Functions and regulatory mechanisms of Gq-signaling pathways*; Neurosignals, **17** 42
- 5) Zimering and Nadkarni (2019) *Schizophrenia Autoantibodies Promote "Biased agonism" at the 5-Hydroxytryptamine 2A Receptor: Neurotoxicity is Positively Modulated by Metabotropic Glutamate 2/3 Receptor Agonism*; Endocrinol. Diabetes Metab. J., **3** 1 [Focus Citation]

**PHYSICAL DATA**

Molecular Weight:	960.10
Molecular Formula:	$C_{46}H_{69}N_7O_{15}$
Purity:	95% by HPLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (up to 10 mg/ml)
Physical Description:	White or off-white lyophilized solid
Storage and Stability:	Store as supplied, at -20°C for at least 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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