

BIM 23042

Cat. No.:	HY-103277
CAS No.:	111857-96-6
Molecular Formula:	C ₆₃ H ₇₃ N ₁₁ O ₉ S ₂
Molecular Weight:	1192.45
Sequence:	{DNal}-Cys-Tyr-{DTrp}-Lys-Val-Cys-{Nal}-NH ₂ (Disulfide bridge:Cys2-Cys7)
Sequence Shortening:	{DNal}-CY-{DTrp}-KVC-{Nal}-NH ₂ (Disulfide bridge:Cys2-Cys7)
Target:	Bombesin Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	BIM 23042, a certain somatostatin (SS) octapeptide analogue, is a selective neuropeptide neuromedin B receptor (NMB-R, BB1) antagonist. BIM 23042 has 100-fold lower affinity for gastrin-releasing peptide (GRP) receptor (BB2). BIM 23042 inhibits Neuromedin B (HY-P0241), ICI 216140 and DPDM-bombesin ethylamide-induced Ca ²⁺ release ^{[1][2][3]} .
In Vitro	BIM 23042 (5 μM) competitively inhibits Neuromedin B-induced [³ H]arachidonate release in huNMBR cells with a K _i of 49 nM [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	BIM 23042 (10 μg; IV; a single bolus) attenuates neurogenic swelling and thermal and mechanical sensitization ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	Mice were 25-30 g male C57BL/6 ^[2]
Dosage:	10 μg
Administration:	IV; a single bolus
Result:	Attenuated neurogenic swelling and thermal and mechanical sensitization.

REFERENCES

- [1]. R R Ryan, et al. Pharmacological profiles of two bombesin analogues in cells transfected with human neuromedin B receptors. *Eur J Pharmacol.* 1996 Jun 13;306(1-3):307-14.
- [2]. Santosh K Mishra, et al. A nociceptive signaling role for neuromedin B. *J Neurosci.* 2012 Jun 20;32(25):8686-95.
- [3]. M Orbuch, et al. Discovery of a novel class of neuromedin B receptor antagonists, substituted somatostatin analogues. *Mol Pharmacol.* 1993 Oct;44(4):841-50.

Caution: Product has not been fully validated for medical applications. For research use only.

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