BIM-23190 hydrochloride

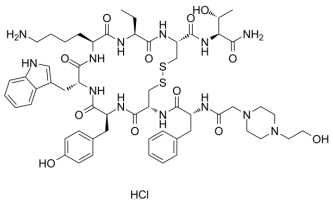
Cat. No.: HY-P3124A

Molecular Formula: $C_{57}H_{80}ClN_{13}O_{12}S_2$

Molecular Weight: 1238.91

Sequence: {4-(2-Hydroxyethyl)-1-piperazinylacetyl}-{D-Phe}-Cys-Tyr-{D-Trp}-Lys-{Abu}-Cys-Thr-NH2 (Disulfide bridge: Cys2-Cys7)

Sequence Shortening: {4-(2-Hydroxyethyl)-1-piperazinylacetyl}-{D-Phe}-CY-{D-Trp}-K-{Abu}-CT-NH2 (Disulfide bridge: Cys2-Cys7)



Target: Somatostatin Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Sealed storage, away from moisture

Powder -80°C 2 years

-20°C 1 year

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (80.72 mM; Need ultrasonic)

H_2O : 100 mg/mL (80.72 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	0.8072 mL	4.0358 mL	8.0716 mL
	5 mM	0.1614 mL	0.8072 mL	1.6143 mL
	10 mM	0.0807 mL	0.4036 mL	0.8072 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 50 mg/mL (40.36 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (2.02 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (2.02 mM); Clear solution
4. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (2.02 mM); Clear solution

BIOLOGICAL ACTIVITY

Description BIM-23190 hydrochloride, a somatostatin analog, a selective SSRT2 and SSRT5 agonist, exhibits K_i values of 0.34 nM and 11.1

	nM for SSTR2 and SSTR5, respectively. BIM-23190 can be used in the study for cancer and acromegaly[1][3].

IC_{50} & Target	SSTR2	SSTR5

In Vitro

BIM-23190 tends to mildly stimulate PRL secretion[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

BIM-23190 (50 μg/mouse, twice a day) exhibits significant anti-tumor (C6 glioma) activity[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male athymic nude (nu/nu) mice, 5-6 wk old (C6 glioma)[2].
Dosage:	50 μg/mouse.
Administration:	Injected twice a day for 19 days.
Result:	Significantly reduced the tumor growth rate.

REFERENCES

[1]. I Shimon, et al. Somatostatin receptor (SSTR) subtype-selective analogues differentially suppress in vitro growth hormone and prolactin in human pituitary adenomas. Novel potential therapy for functional pituitary tumors. J Clin Invest. 1997 Nov 1;100(9):2386-92.

[2]. Federica Barbieri, et al. Differential efficacy of SSTR1, -2, and -5 agonists in the inhibition of C6 glioma growth in nude mice. Am J Physiol Endocrinol Metab. 2009 Nov;297(5):E1078-88.

[3]. T J Gillespie, et al. Novel somatostatin analogs for the treatment of acromegaly and cancer exhibit improved in vivo stability and distribution. J Pharmacol Exp Ther. 1998 Apr;285(1):95-104.

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