Galantide TFA

Cat. No.: HY-P0262A

Molecular Formula: $C_{106}H_{152}F_3N_{25}O_{28}S$

Molecular Weight: 2313.55

Sequence: Gly-Trp-Thr-Leu-Asn-Ser-Ala-Gly-Tyr-Leu-Leu-Gly-Pro-Gln-Gln-Phe-Phe-Gly-Leu-Met-NH2

GWTLNSAGYLLGPQQFFGLM-NH_2 (TFA salt)

Sequence Shortening: GWTLNSAGYLLGPQQFFGLM-NH2

Target: Neuropeptide Y Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Sealed storage, away from moisture and light, under nitrogen

Powder -80°C 2 years

-20°C 1 year

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

SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (43.22 mM; Need ultrasonic)

H_2O : < 0.1 mg/mL (ultrasonic;adjust pH to 2 with HCl) (insoluble)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	0.4322 mL	2.1612 mL	4.3224 mL
5 mM	0.0864 mL	0.4322 mL	0.8645 mL
10 mM	0.0432 mL	0.2161 mL	0.4322 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (1.08 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (1.08 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Galantide TFA is a reversible and non-specific galanin (GAL) receptor antagonist. Galantide TFA dose-dependently shows antagonism to galanin-induced K^+ conductance with an IC_{50} value of 4 nM. Galantide TFA can be used for the research of neurological disease and hormone metabolism research[1][2].

In Vitro

Galantide TFA (0.1-10000 nM) inhibits the galanin-induced activation of the K^+ conductance with an IC_{50} value of 4 nM[1].

Galantide TFA (0.1-10000 nM) dose-dependently inhibits the voltage-dependent Ba^{2+} current with an IC_{50} value of 16 nM[1].

	Galantide TFA (0.1-10000 nM) shows a maximum inhibition of approximately 40% to voltage-dependent Ba^{2+} current[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Galantide TFA (5 nm; icv, once) inhibits luteinizing hormone (LH) release of ovariectomized (OVX) rats[2]. Galantide TFA (1 and 5 nm; iv, for 3 times, at 1300, 1400 and 1500 h) decreases steroid-induced luteinizing hormone (LH) surge in estradiol benzoate (EB) primed of ovx rats[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Adult female Crl:CD(SD)BR ovarian steroid-primed ovariectomized (OVX) rats[2]
Dosage:	5 nm
Administration:	Intracerebroventricularly (icv) injection; 5 nm, 60 min before GAL
Result:	Blocked GAL-induced LH release.

REFERENCES

[1]. Mulvaney JM, et al. Galantide distinguishes putative subtypes of galanin receptors in mudpuppy parasympathetic neurons. Eur J Pharmacol. 1995 Dec 4;287(1):97-100.

[2]. Sahu A, et al. Role of galanin in stimulation of pituitary luteinizing hormone secretion as revealed by a specific receptor antagonist, galantide. Endocrinology. 1994 Feb;134(2):529-36.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA