Resomelagon acetate

Cat. No.: HY-147301A

CAS No.: 1809420-72-1

Molecular Formula: $C_{16}H_{18}N_6O_4$

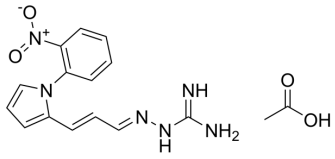
Molecular Weight: 358.35

Target: Melanocortin Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: 4°C, sealed storage, away from moisture

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (279.06 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.7906 mL	13.9528 mL	27.9057 mL
	5 mM	0.5581 mL	2.7906 mL	5.5811 mL
	10 mM	0.2791 mL	1.3953 mL	2.7906 mL

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

BIOLOGICAL ACTIVITY

Description

Resomelagon (AP1189) acetate is a potent, orally active melanocortin receptor (MR) agonist about MC_1 and MC_3. Resomelagon acetate induces ERK1/2 phosphorylation and Ca^{2+} mobilization. Resomelagon acetate has anti-inflammatory activity. Resomelagon acetate can be used for obesity and chronic inflammation research[1][2].

IC_{50} & Target

Targrt: MC1 and MC3[1]

In Vitro

Resomelagon acetate (0-1000 μM; 8 min; HEK293A cells) promotes melanocortin signal transduction through ERK1/2 phosphorylation and Ca^{2+} mobilization[1].

Resomelagon acetate (1 nM; 30 min; peritoneal macrophages) has anti-inflammatory activity and inhibits TNF-α release and efferocytosis[1].

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

In Vivo

Resomelagon acetate (0-10 mg/kg; i.p., i.v. and p.o.; for 24 h; male C57BL/6J wild-type (WT) and BALB/c mice) promotes resolution of acute inflammation in vivo[1].

Resomelagon acetate (25-50 mg/kg; p.o.; daily, for 8 d; male C57BL/6J wild-type (WT) and BALB/c mice) reduces arthritis in mice[1].

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

REFERENCES

[1]. Montero-Melendez T, et, al. Biased agonism as a novel strategy to harness the proresolving properties of melanocortin receptors without eliciting melanogenic effects. J Immunol. 2015 Apr 1;194(7):3381-8.

[2]. WHO Drug Information. International Nonproprietary Names for Pharmaceutical.

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