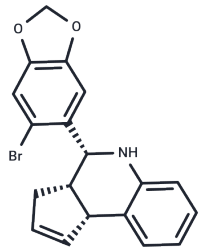
Data Sheet (Cat.No.T7389)

TargetMol

G15

Chemical Properties



CAS No. : 1161002-05-6

Formula: C19H16BrNO2

Molecular Weight: 370.24

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	G15 is a cell-permeable non-steroidal antagonist of GPER (Ki = 20 nM)
Targets(IC50)	Estrogen Receptor/ERR
In vivo	G-15 antagonizes the anti-depressive effects of estrogen in vivo[1].
Animal Research	G15 and G1 were first dissolved in DMSO and diluted with saline; the final concentration in DMSO was 1 mM. Desipramine and E2 (cyclodextrin-encapsulated, 4-5.5% E2) were dissolved in saline solution and DMSO was added to a final concentration of 1 mM. An appropriate vehicle-treated group (saline with 1 mM DMSO) was included as a control (sham). All solutions were freshly prepared before each experimental series. Independent groups of mice (n=12-16) were treated with two consecutive intraperitoneal injections as follows: vehicle solution + vehicle solution (sham group); vehicle + G-1 (indicated amount in nmol); vehicle + desipramine (10mg/kg); G15 (10nmol/mouse) + desipramine (10mg/kg); G15 (10nmol/mouse) + G-1 (1nmol/mouse); vehicle + G15 (10nmol/mouse); vehicle + soluble E2 (5 mg/kg); G15 (25nmol/mouse) + soluble E2 (5 mg/kg). The second compound was injected 15 min (7 min for E2) after the first injection and the tail suspension test performed 30 min after the second injection[1].

Solubility Information

Solubility	DMSO: 122.5 mg/mL (330.87 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.4 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.701 mL	13.5048 mL	27.0095 mL
5 mM	0.5402 mL	2.701 mL	5.4019 mL
10 mM	0.2701 mL	1.3505 mL	2.701 mL
50 mM	0.054 mL	0.2701 mL	0.5402 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Nayak T K , Bologa C G , Leitao A , et al. In vivo effects of a GPR30 antagonist[J]. Nature Chemical Biology, 2009, 5 (6):421-427.
Dawid M, Kurowska P, Pawlicki P, et al.Visfatin (NAMPT) expression in human placenta cells in normal and pathological conditions and its hormonal regulation in trophoblast JEG-3 cells.PloS one.2024, 19(9): e0310389.
Bai L Y , Weng J R , Hu J L , et al. G15, a GPR30 antagonist, induces apoptosis and autophagy in human oral squamous carcinoma cells[J]. Chemico-Biological Interactions, 2013, 206(2):375-384.