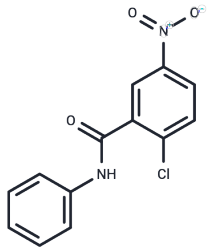
Data Sheet (Cat.No.T2260)

TargetMol

GW9662

Chemical Properties



CAS No. : 22978-25-2

Formula: C13H9ClN2O3

Molecular Weight: 276.68

Storage: 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	GW9662 (TIMTEC-BB SBB006523) is a PPARγ antagonist (IC50=3.3 nM) with selectivity. GW9662 can be used to study the pathogenesis of metabolic diseases, such as obesity and diabetes, by inhibiting the activity of PPARγ. GW9662 can be used to study the pathogenesis of inflammatory diseases, such as atherosclerosis and rheumatoid arthritis. GW9662 has anti-tumor effect.
Targets(IC50)	PPAR
In vitro	**METHODS**: Human breast cancer cell lines (MCF7, MDA-MB-468, and MDA-MB-231) were treated with GW9662 (100 nM-50 mM) for 72 hours, and MTT assay was used to detect the inhibition of cell growth. **RESULTS**: GW9662 significantly inhibited the proliferation of MCF7, MDA-MB-468, and MDA-MB-231 cells (IC50= 20-30 μM). [1]
In vivo	**METHODS**: To study the blocking effect of GW9662 on the protective effect of lipopolysaccharide, first, rats were pretreated with lipopolysaccharide (1 mg/kg,i.p.), which could significantly weaken all ischemia/reperfusion injury characteristics caused by renal injury and dysfunction. Then, GW9662 (1 mg/kg) was intraperitoneally injected into the rats. **RESULTS**: GW9662 can block the protective effect of lipopolysaccharide.[2]
Kinase Assay	Binding assay: The human PPARα, PPARγ, and PPARδ ligand binding domains (LBDs) are expressed in E. coli as polyhistidine-tagged fusion proteins. Receptors are immobilized on SPA beads by addition of the desired receptor (15 nM) to a slurry of streptavidin-modifed SPA beads (0.5 mg/mL) in assay buffer. The mixture is allowed to equilibrate for at least 1 hour at room temperature, and the beads are pelleted by centrifugation at 1×103 g. The supernate is discarded, and the beads are resuspended in the original volume of fresh assay buffer with gentle mixing. The centrifugation/resuspension procedure is repeated, and the resulting slurry of receptor-coated beads is used immediately or stored at 4 ℃ for up to 1 week before use. [3H]GW2443 are used as radioligands for determination of competition binding to PPARα, PPARγ, and PPARδ, respectively. Unless otherwise indicated, the buffer used for all assays is 50 mM HEPES (pH 7), 50 mM NaCl, 5 mM CHAPS, 0.1 mg/mL BSA, and 10 mM DTT. For some experiments, the HEPES (pH 7) is replaced with 50 mM Tris (pH 8).
Cell Research	MDA-MB-231 cells are seeded at a density of 1 × 105 cells per 25 cm3 tissue culture flask. After 24 h (day 0), the growth medium is replaced with fresh medium containing rosiglitazone (50 μM), GW9662 (10 μM) or both together. Control flasks receives 0.1%

Cell Research	DMSO. Cells are harvested on days 0, 3, 5, 7, 10 for each treatment condition by trypsinisation, stained using trypan blue, and the total and viable number of cells per flask calculates using a haemocytometer.(Only for Reference)

Solubility Information

Solubility	DMSO: 255 mg/mL (921.64 mM),Sonication is recommended. Ethanol: 6.9 mg/mL (24.94 mM),Heating 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: 5 mg/mL (18.07 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	3.6143 mL	18.0714 mL	36.1428 mL
5 mM	0.7229 mL	3.6143 mL	7.2286 mL
10 mM	0.3614 mL	1.8071 mL	3.6143 mL
50 mM	0.0723 mL	0.3614 mL	0.7229 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

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