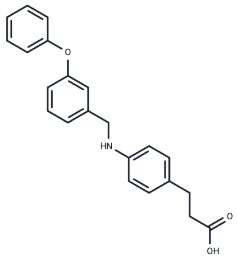
# Data Sheet (Cat.No.T1781)

TargetMol

GW9508

## Chemical Properties



CAS No. : 885101-89-3

Formula: C22H21NO3

Molecular Weight: 347.41

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

## Biological Description

| | |
|---|---|
| Description | GW9508(GW 9508) is a potent and selective agonist for FFA1 (GPR40), stimulates insulin secretion in a glucose-sensitive manner. |
| Targets(IC50) | GPCR,Potassium Channel |
| In vivo | In MIN6 cells, GW9508 stimulates insulin secretion in a dose-dependent manner and enhances insulin secretion mediated by KCl. In rat β-cells, GW9508 induces hyperpolarization and the opening of KATP channels. In HaCaT cells, GW9508 inhibits the expression of IL-11, IL-24, and IL-33 induced by TNF-α and IFN-γ. Additionally, in normal human epidermal keratinocytes, GW9508 suppresses the production of CCL5 and CXCL10. |

## Solubility Information

| | |
|---|---|
| Solubility | Ethanol: 34.7 mg/mL (99.88 mM),Sonication is recommended.<br>DMSO: 150 mg/mL (431.77 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.8784 mL | 14.3922 mL | 28.7844 mL |
| 5 mM | 0.5757 mL | 2.8784 mL | 5.7569 mL |
| 10 mM | 0.2878 mL | 1.4392 mL | 2.8784 mL |
| 50 mM | 0.0576 mL | 0.2878 mL | 0.5757 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.

Reference

Briscoe CP, et al. Br J Pharmacol, 2006, 148(5), 619-628.
Li M, Wu Y, Qiu J, et al.Huangqin Decoction ameliorates ulcerative colitis by regulating fatty acid metabolism to mediate macrophage polarization via activating FFAR4-AMPK-PPARα pathway.Journal of Ethnopharmacology. 2023: 116430.
Zhang L, Zhang Z, Wu Y, et al.Activation of free fatty acid receptors, FFAR1 and FFAR4, ameliorates ulcerative colitis by promote fatty acid metabolism and mediate macrophage polarization.International Immunopharmacology.2024, 130: 111778.
Zhao YF, et al. J Endocrinol, 2008, 198(3), 533-540.
Fujita T, et al. J Invest Dermatol, 2011, 131(8), 1660-1667.



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