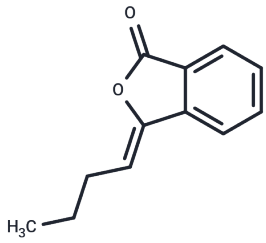
Data Sheet (Cat.No.T3S2072)

TargetMol

3-Butylidenephthalide

Chemical Properties



CAS No. : 551-08-6

Formula: C12H12O2

Molecular Weight: 188.22

Storage: Keep away from direct sunlight
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	1. 3-Butylidenephthalide (Butylidene phthalide) has antihyperglycemic effect is due to inhibition of α-glucosidase at the intestinal level, inhibited the activity of yeast-α-glucosidase (IC(5) 2.35 mM) in a noncompetitive fashion with a K(i) of 4.86 mM.
Targets(IC50)	Parasite,Glucosidase

Solubility Information

Solubility	DMSO: 250 mg/mL (1328.23 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 (10.63 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	5.3129 mL	26.5647 mL	53.1293 mL
5 mM	1.0626 mL	5.3129 mL	10.6259 mL
10 mM	0.5313 mL	2.6565 mL	5.3129 mL
50 mM	0.1063 mL	0.5313 mL	1.0626 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

Saw C L L , Qing W , Zheng-Yuan S , et al. Effects of natural phytochemicals in Angelica sinensis (Danggui) on Nrf2-mediated gene expression of phase II drug metabolizing enzymes and anti-inflammation[J]. Biopharmaceutics & Drug Disposition, 2014, 34(6):303-311.

He J, Yuan R, Jiang Y, et al.Esculetin facilitates post-stroke rehabilitation by inhibiting CKLF1-mediated neutrophil infiltration.Acta Pharmacologica Sinica.2024: 1-14.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481