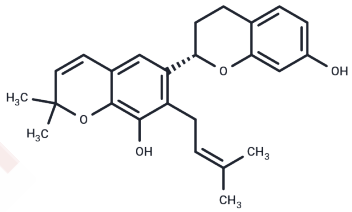
Data Sheet (Cat.No.T20232)

TargetMol

Kazinol B

Chemical Properties



CAS No. : 99624-27-8

Formula: C25H28O4

Molecular Weight: 392.49

Storage: Store at low temperature,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	Kazinol B is an inhibitor of nitric oxide (NO) production, an isopentenylated flavan with a dimethylpyran ring.Kazinol B improves insulin sensitivity by activating the insulin-Akt signalling pathway and AMPK, which enhances glucose uptake.Kazinol B stimulates gene expression and secretion of adiponectin and can be used to study diabetes.
Targets(IC50)	Akt,NO Synthase,AMPK
In vitro	Kazinol B (2-20 μM ; 5 days) dose-dependently increases PPARγ and C/EBPα protein and mRNA levels in MDI-treated 3T3-L1 adipocytes.[1] Kazinol B (10-20 μM ; pre-treated for 1 h followed by 1 h insulin) dose-dependently increases insulin-dependent Akt phosphorylation.[1] Kazinol B (2, 10 and 20 μM ; 72 hours) shows no toxicity to adipocytes in 3T3-L1 cells.[1] Kazinol B (2-20 μM ; 72 hours) dose-dependently increases lipid accumulation by 2.4-fold (at 20 μM) treatment as compared with MDI-treated cells.[1] Kazinol B (2-20 μM ; 24 hours) increases the retained 2NBDG-fluorescence in cells in a dose-dependent manner in differentiated 3T3-L1 adipocytes and C2C12 myoblasts.[1] Kazinol B dependently increases the MDI-stimulated GLUT4 mRNA level up to 4.7-fold as compared with MDI-only treated cells.[1] Kazinol B (6.25, 12.5, 25, 50 μM ; 18 hours) dose-dependently reduces amounts of iNOS protein in macrophages (RAW 264.7 cells) activated by LPS (1 ug/mL).[2]

Solubility Information

Solubility	DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5478 mL	12.7392 mL	25.4784 mL
5 mM	0.5096 mL	2.5478 mL	5.0957 mL
10 mM	0.2548 mL	1.2739 mL	2.5478 mL
50 mM	0.051 mL	0.2548 mL	0.5096 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

Lee H, et al. Kazinol B from Broussonetia kazinoki improves insulin sensitivity via Akt and AMPK activation in 3T3-L1 adipocytes. Fitoterapia. 2016 ; 112:90-6.
Ryu JH, et al. Inhibition of nitric oxide production on LPS-activated macrophages by kazinol B from Broussonetia kazinoki. Fitoterapia. 2003 Jun ; 74(4):350-354.
Wang JP, et al. The signal transduction mechanism involved in kazinol B-stimulated superoxide anion generation in rat neutrophils. Br J Pharmacol. 1998 ; 125(3):517-525.
Wang JP, et al. Stimulation of cellular free Ca2+ elevation and inhibition of store-operated Ca2+ entry by kazinol B in neutrophils. Naunyn Schmiedebergs Arch Pharmacol. 2004 ; 370(6):500-509.
Lee H, et al. Kazinol B from Broussonetia kazinoki improves insulin sensitivity via Akt and AMPK activation in 3T3-L1 adipocytes. Fitoterapia. 2016 ; 112:90-96.

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