# Data Sheet (Cat.No.TN2346)



### Mogrol

# **Chemical Properties**

CAS No.: 88930-15-8

Formula: C30H52O4

Molecular Weight: 476.73

Appearance: no data available

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

## **Biological Description**

Description	Mogrol, a biometabolite of mogrosides, functions by inhibiting the ERK1/2 and STAT3 pathways, diminishing CREB activation, and activating AMPK signaling.			
Targets(IC50)	ERK,AMPK,STAT			
In vitro	Mogrol, but not mogrosides, suppressed triglyceride accumulation by affecting early (days 0 2) and late (days 4 8), but not middle (days 2 4), differentiation stages.?At the late stage, mogrol increased AMP-activated protein kinase (AMPK) phosphorylation and reduced glycerol-3-phosphate dehydrogenase activity.?At the early stage, mogrol promoted AMPK phosphorylation, inhibited the induction of CCAAT/enhancer-binding protein β (C/EBPβ;?a master regulator of adipogenesis), and reduced 3T3-L1 cell contents (e.g., clonal expansion).?In addition, mogrol, but not the AMPK activator AICAR suppressed the phosphorylation and activity of the cAMP response element-binding protein (CREB), which regulates C/EBPβ expression.?Mogrol suppressed adipogenesis by reducing CREB activation in the initial stage of cell differentiation and by activating AMPK signaling in both the early and late stages of this process[2].			

#### **Solubility Information**

Solubility	DMSO: 110 mg/mL (230.74 mM),Sonication is recommended.
	(< 1 mg/ml refers to the product slightly soluble or insoluble)

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#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.0976 mL	10.4881 mL	20.9762 mL
5 mM	0.4195 mL	2.0976 mL	4.1952 mL
10 mM	0.2098 mL	1.0488 mL	2.0976 mL
50 mM	0.042 mL	0.2098 mL	0.4195 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

Liu C, et al. Mogrol represents a novel leukemia therapeutic, via ERK and STAT3 inhibition. Am J Cancer Res. 2015 Mar 15;5(4):1308-18.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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